Zy-El: Trial by Fire V4.5 unofficial

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Diablo2 version: LoD Expansion Patch v1.10f

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DESCRIPTION (why Kato made this mod):

I made this Mod to play the game the way I like to play it.

Who is Zy-El? She was my first Assassin that I played up to level 89 using the un-modded, off-the-shelf version of Diablo2-LOD. After slaying Diablo and his brothers a few times, I was left asking myself: is this all there is? Then I heard about some of the neat stuff happening on Battle.net and felt ripped off in single player mode. That's why I created this mod and I name it after Zy-El.

This Mod is not a cake-walk. Act I Normal is the hardest when your character is running from Skels and has a hard time killing QuillRats. I don't want to hear any whining about how tough this Mod is to play! If you want an easier game, go back to "vanilla" LOD or play some other Mod. Better yet - go make your own Mod!

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CHANGES IN V4.5 (some new stuff):

Mod runs on D2 LOD v1.10 instead of x1.09d.

Damage caps removed: in previous version if a player reached ~82k damage with a single damage type (phys, cold, etc) the value would become negative resulting in no damage at all from that source. The new damage cap is 8.3m if you ever manage to reach it.

Max skill level raised: it was raised from 100 (v4.4d) to 250 for all skills. Skill points needed to increase skills have also changed in the following way:

Skill Ivl 1-50 require 1 skill point to learn;
Skill Ivl 51-100 require 2 skill points to learn;
Skill Ivl 101-125 require 3 skill points to learn;
Skill Ivl 101-125 require 3 skill points to learn;
Skill Ivl 126-150 require 4 skill points to learn;
Skill Ivl 226-250 require 8 skill points to learn;

Skill changes: some poison skills that were doing damage not proportional to their level were returned to their original damage ranges. Slight changes to many skills.

Skill synergies: a feature that first appeared with vanilla v1.10. All synergies have been drastically reduced to make them as a secondary source of damage boost once the main skill reached high level instead of being the main damage source.

Item sets: I always felt sets were neglected in this mod so now sets will give +1 all skills in addition to their regular partial set bonuses and v1.10 specific bonuses after completing full set. The full set bonuses include auras, oskills, reanimate on kill, experience boost, price reduction.

Items: strength and dexterity requirements to equip high end items have been raised from 255 to 1500-2000 based on item type. Items have slightly random stat requirements now. Base damage and defense values were slightly changed in the original range. Low end weapons benefit much less from strength and dexterity bonuses compared to high end weapons.

Monsters: changed most stats for NM and Hell difficulties since in v4.4C most monsters had higher stats in NM than in Hell.

Resistance penalty: resistance penalty by difficulty was completely removed. Instead players lose 1 resistance with each level. This should encourage high end players to raise both defense and offense instead of going for damage only. Jewels that give resistances per level were removed though some items with resistances per level still exist.

Poison damage: poison damage on posters and cube scrolls was fixed (raised to be the same as other damage types).

Potion effectiveness: healing and mana potion effectiveness has been increased to 100-200-400-800-1600 point for healing potions and 50-100-200-400-800 for mana potions. These values do not include player class multipliers which can further double the restored amount. NPCs will also sell better potions at higher difficulties.

Gems and runes: some socketables have their bonuses slightly changed. Check appendix A and appendix B for full list.

Cube scrolls: damage bonuses from cube scrolls were slightly improved. In addition cube scroll that used to add either min or max damage add both min and max damage now. Many cube scroll descriptions were improved to show exact bonus added. Cube scroll upgrade recipes changed.

Collectors: the whole system has been reworked to make it easier to be used.

Mega-loading and Cube Locks: each recipe that preserves original item stats and adds new ones will now increase level requirements. This mainly applies to recipes that use cube locks or Zy-El scrolls. The reason for such limitation is to prevent players to gain insane power to with the mod isn't adjusted. I suspect Kato intentionally kept the damage cap at 82k since it was very easy to raise that.

Hirelings: available skills were rebalanced. More info can be found in the hireling section below.

Get-Hit skills: melee activation was changed from 'received damage' to 'attacked'. The same rule applies to 'Attacker takes damage' and 'Attacker takes lightning damage' affixes. Ranged activation remains the same - 'received damage' for get-hit skills.

Lost features: there were some things that could not be recreated after switching from v1.09 to 1.10. The list includes:

- *Charsi gives set item instead of crafted one as A1Q5 reward. It can be downgraded to crafted later.
- *Smaller Horadric cube: 10 x 8 because I didn't find any way to move the transmute button.
- *Player level display in character select screen is limited to level 255.
- *Menu position in initial screen returned to its default position.

THE GOOD NEWS (Some features to spice things up):

Item drops are more generous than regular LOD. Drop rate and drop quality increase with player level, game difficulty and Act. There's more likelihood of set, rare, and unique items being dropped. No less than flawed gems or any runes lower than Ith will drop in Nightmare. No less than standard gems or runes lower than Sol will drop in Hell. (Better stuff and less garbage!)

Infinite stash pages with Yohann's Plugy. We are all soooo grateful to Yohann for developing his wonderful infinite stash plug-in. We can now collect to our hearts' content. (Yowsa!! How are gonna keep track of all our stuff??)

Increased stash (10x10), inventory (10x10) and cube (10x10) sizes using the plug-in. (More room to haul more stuff!! Thanks to Fusman and Zhoulumcrist!)

Certain runes, gems, jewels and charms may be purchased at various shops. Each successive Act offers better and more of these items for sale. Prices for these items are VERY EXPENSIVE. (Yeah! No more searching under every rock and killing countless hordes just to get the same old garbage.)

Enabled Elixirs! These are rare potions used extensively in the new cube recipes. There are an entire section of recipes dedicated to the use of Elixirs. These Elixirs can no longer be consumed as they were in LOD. If you can't find an Elixir, make it using the cube recipe in the Basic Recipes section. (Wow! Something different!)

Enabled Demon Keys! These keys are imbued with a demon spirits and can be used in the Cube recipes described below to create Demon items and other unique recipes. Or, they can be sold to merchants for a hefty sum! Beware! These keys can open chests if you don't have any regular keys. Be sure to always have regular Keys. Where to find Demon Keys? You might find one after killing, say . . . a big demon. (Wowee! Something more different!)

Created Cube Scrolls! These rare scrolls contain 1-shot cube recipes. Place the Cube Scroll in the Cube along with the stated input ingredient(s). Click the Transform button, the Cube Scroll disappears along with the base item(s) and the stated output item is left behind. The cryptic recipe on the Cube Scroll will over-ride any other recipes in effect. Simply stated, the Cube Scroll instructs the Cube how to transform. There are 960+ different Cube Scrolls and they come in four distinct flavors: Common, Uncommon, Secret and Arcane. And there are cube recipes to transform Common Cube Scrolls to Uncommon and Uncommon to Secret and Secret to Arcane! (Wow! A new item type! Different graphics too! Thanks to Shadow Talon, Riparious and JBouley!)

Created Demon Boxes! These mystery boxes can only be opened by transmuting with a Demon Key in the Horadric Cube. Sometimes good, sometimes not. These boxes themselves will provide a clue about what they contain; if the box could talk - this is what it would say to you. It is up to the player to decide whether or not to open it or sell to a merchant for a hefty chunk of change. (Do you feel lucky, punk?)

Merchant maximum buyback limit increased. Item maximum buyback limits for merchants has been increased to 100 million gold. Magic, Rare, Set and Unique items are worth more gold too. Repair costs have been quartered! (Better value for good stuff sold back and cheaper to fix and recharge stuff.)

Gem attributes have been enhanced with higher bonuses. Diamond and amethyst modifiers have been tweaked. (Always felt that gems became eclipsed by the advent of runes and jewels.)

No experience penalty for dying in Nightmare and Hell difficulties. (That always ticked me off . . . to no end!!)

Higher probability for class specific item drops. (Formerly used to be only 1/3 as likely as non-class, a little better now.)

Skill levels maximum extended from 20 all the way up to 250! Warning: not all skills will work beyond a certain level - haven't figured them all out yet. (Yeah! Level 100 Fireballs!!)

Added new Bracer class weapons - unarmed combat. These weapons act as two-handed weapons for non-Barb classes and may also have Barb skill bonuses. Bracers are very. Bracers may have one socket to allow for some player customization. In game, characters will appear to be unarmed - don't be fooled! For those who want to build a non-weapon Hercules type - real men need only apply!)

New monster graphics! Thanks to Har'lea'quinn, FoxBat, Incandescent One, Joel, BlackHeart and Phrozen Heart. Some of the monsters harken back to the days of Diablo 1, for those of you who remember. (Look for them! You'll love 'em!!)

Maximum gold capacity on character and in stash significantly increased! Storing gold is no longer such a problem. Carried gold is caped to 100k per level; stashed gold is capped to 500k per level. Grab all the gold you can, now that you can!!)

Characters may now level up to level 10,000. Experience on Nightmare and Hell difficulties have been scaled to ensure that you can play your characters for a veeeeery looooong time to come. (I AM IMMORTAL!!! Haven't gone that far yet . . . but we'll see)

Assassin class weapons (Katars, Claws and the like) now can be imbued with Assassin skill bonuses when dropped by monsters. Also added a few new four-socket Star and Fang weapons for Assys. The Star weapons are a new class of

weapons. Exceptional and Elite recipes can be applied: Blade Star -> Blood Star -> Death Star -> Blood Fang Always felt that the Assassin got ripped off when everyone else got these bonuses.)

Increased various item stacking limits. Keys, books, arrows and bolts now stack to 500. Thrown potions also stack to 500. Thrown weapons have $3 \times Maxstack$ limit. (Equipped to go on those long expeditions.)

All missiles and arrows travel 75% faster. All missiles fired from bows, crossbows or spells are 75% faster. This also applies to monster missiles too!! Beware of BloodRaven and those Burning Skeletal archers! (Zip-zip-zip! Can't outrun arrows anymore!)

Poisoned quill arrow/bolts can be purchased from arms merchants. These special missile weapons are poison quills modified to be fired from bows and crossbows. The cost for these poisoned quills is more than standard arrows but provide low-level characters with a different option to regular physical damage arrows. Bolt quills for crossbows are shorter than the full arrow quills. (Poison damage just like a Quillrat and worse!!!)

Magic arrows/bolts can be purchased from arms merchants. There will always be a quiver of magic arrows/bolts available for purchase at a higher price than normal arrows/bolts. They come with some magical abilities but can be specifically enchanted using the Magic Missile Cube Recipes below. All magic quivers start with 500. Certain merchants can recharge partial quivers - sell back a partial quiver to a merchant (who doesn't normally sell them) for a pittance and buy back a full quiver for a higher cost - note: this only works with non-socketed quivers. Don't shoot that last arrow or else the entire quiver disappears! Notice that magic bolt quivers are indeed smaller than normal bolts. Read the section on Magic Missile Recipes for more detailed information (Real Magic Missiles! Bows for everyone!)

Experience point costs for each level have been reduced. As a result, level ups are a lot quicker. Be careful how you distribute your stat points. (This ought to make it easier to get up to level 10,000.)

Minor improvements/tweaks to some classes/skills/spells. With the drastic increased nastiness of monsters, some skills were effectively nerfed. Skill effects beyond level 20 had to be set up. Some minor, some major changes were required to all classes. (Characters will not be the same as they were in vanilla LOD; is that a bad thing?)

Belts, gloves, boots, rings and amulets are now socket-able. Gloves acts as weapons; belts acts as armor; boots acts as shield modifiers; rings acts as shield and amulets acts as armor. Use the cube recipe to add sockets. (Yeah! More sockets!!)

All Armors has been improved. Maximum AC for all armor types have been increased 40%. Most armors have been given additional sockets, particularly Exceptional and Elite armors. Also, all armor types will absorb 2 or more points of damage. (Better armor counts for something now!)

New Charms have been added. There are now 2x2 (Quad), 1x4(Tall), 2x1 (Narrow) and 2x3(Hex) sized charms. These particular charms may drop as Normal, Magic or Rare. Normal charms may drop WITH sockets! And, yes, there are runewords for these particular charms!!! (Wow!)

Charms are also socket-able. Small = shield (max 1 socket), Large = armor (max 2 sockets), Grand = weapon (max 3 sockets), Quad = weapon (max 4 sockets), Tall = armor(max 4 sockets), Hex=shield(max 6 sockets), Narrow=weapon(max 2 sockets). Sockets can be created using the cube socketing recipes below. (Yeah! Even more sockets!!! You won't see this on Bnet!!)

Thrown weapons are socket-able! Throwing knives and axes (2), javelins (3) and throwing spears (4) can have the stated number of sockets. Remember, don't throw that last dagger or last axe or you will lose the socketed pieces! Socketed thrown weapons will NOT drop. Use the cube recipe to add sockets. (Yowsa! Major missile damage!)

Upgraded hirelings with higher starting levels, more skills, more health, more defense and faster level up. Much more expensive to hire and resurrect also. Mercs can also use more armor types now! (You'll definitely NOT see this on Bnet!!)

Shrines are now more likely to be better and all shrine effect durations have been greatly increased. Shrine effects also more powerful in most cases. (Makes it worthwhile to visit a shrine now!)

Corpse explosion death from fire-enchanted Super Unique Monsters has been downgraded or eliminated. Fire-enchanted Champions still exist, however; so beware! (Always thought this was a sucky way to die after killing a Superdude.)

More UNIQUE items! Normal LOD had about 300 Uniques. There are now 4500+ in this mod! A unique for every item type . . . almost. There are also unique charms, jewels and arrows/bolts now and you can socket them too! (Yeah! Real neat stuff you'll never see on Battle.net!!!)

All random generated map levels increased in size by 400%. More rooms, more monsters, more treasure! (More of a challenge finding your way to the next level!)

Graveyard in Act I modified! Used Joel's modified map plug-in. Harem in Act II and Travincal in Act III modified! Used Deathfile's map plug-ins. Added a treasure rooms and new layouts. Bridge Lava in Act IV modified! Used Vendanna's map plug-in. (Bring on the Bugs!) Borrowed the Tristram map from BlackHeart's Wheel of Time Mod. Made

use of Lord Drekas' Arreat Summit to form the Maze of Madness. Countess' Lair, Inner Cloister, Cathedral, Maggot Queen, Duriel, WorldStone Throne and WorldStone Keep maps modified! Used *Astalion*'s map plug-ins. (Run the gauntlet!

Replaced some Act V maps to create elite Insanity levels: Killing Grounds, Suicide Sanctum, Wayside of Woe and the Orifice to Oblivion. These are insanely difficult levels intended only for elite level players. Thanks to Dezdrehel for Temple re-design. (Kill or be killed - your odds are about 50/50... or worse.)

Improved inventory graphics. Over 250+ new graphics added! Most Exceptional and Elite items appear different than Regular item equivalents. Thanks to item packs from JBouley, Om, Riparious and Shadow Talon. (The better items actually look different now!)

THE BAD NEWS (I wanted the game to be playable and of some challenge):

Players gain 3 stat points per level. (You're gonna need 'em!)

Players only start with the Horadric Cube, an empty Magic Collector, a few Cube Scrolls and a gem. No other base equipment is given to the starting character. (Use the Cube Scroll and gem in the Cube! Be careful what you buy with your gold!)

Level requirements for Gems and Runes increased. (Need more levels to use these items!)

Stamina costs increased for run/walk all classes. (Run while you can or else walk)

Strength and Dexterity requirements for Weapons and Armor are increased. (Are you strong enough?)

Merchants are greedier and charge more for all items. Especially in Harragoth! Be careful how you spend!)

Resistance penalties are based on character level instead or difficulty level. (It's a cruel, cruel world out there.)

Increased monster speed. (Fast buggers!)

Increased monster hit points. (Tough, fast buggers!)

Increased monster AC. (Hard, tough, fast buggers!)

Increased monster attack rating. (Nasty, hard, tough, fast buggers!)

Increased damage inflicted. (Vicious, nasty, hard, tough, fast buggers!)

Increased monster density. (Lots of vicious, nasty, hard, tough, fast buggers! Bring 'em on!!!)

Re-enabled some monsters Blizzard left out. Re-enabled the Quill Bears, Spike Fiends and their ilk with added poison attack. Also re-enabled Sand Fishers, Assailants and Black Souls. (Originally designed by Blizzard but never implemented. Who knows why?)

Converted some pets to enemies. Added RockGolem, FleshGolem, SteelGolem and FuryGolems as enemies! Also beware of the Grendels and Shadow Rogues. (More bad guys to deal with!)

Re-used some of the unique monster graphics. Created Revenants (from Griswold), Harathnars (from The Smith), and Medusas (from Andariel). Created the invisible Boogey Men, Phantasms and Langoliers. (The more, the merrier!)

Skill tiers have been changed from the normal skill levels 1/6/12/18/24/30 to 5/10/15/20/... /120. Yes, that's right! You get NO SKILLS until level 5 and at that, you only get ONE skill!! All the skill tiers have been modified to grant one or two new skills per tier. Players have to rely more on the previously unused low-level skills. This was done in response to JC who said, "Single player is too EASY!" (Gotta make it challenging somehow. It's worthwhile to develop in all 3 skill trees now. Oh, well, you've got 10,000 levels to get there.)

NEW & UPDATED RUNEWORDS (some things old & some things new):

All of the original 24 LOD Runewords have been re-enabled and upgraded, the 145 incomplete Runewords completed and some 750+ Runewords added - that's a total of 900+ Runewords - whew! And yes, there are Runewords for gloves, belts, boots and thrown weapons. Sorry, no Runewords for rings or amulets. No Runeword attributes have been listed because it would be just too much to print. Better runes, better attributes. More runes, more attributes. Runewords only work on Normal, Magic or Rare socketted items. It is not possible to put Runewords on Crafted, Unique or Set items.

There are now Runewords for Charms! The Charm Runewords make use of existing Runewords for items. Because of the nebulous nature of charms, Runeword attributes are roughly half of what they would be on normal base items. For example, a Runeword which would normally give +100 attack on a sword would only give +50 attack when put on a Quad Charm. Some Runewords which give self-repair or ease of use bonuses, of course, do not exist when applied to Charms.

There are now Runewords that include Gems and Jewels! Referred to as Gemwords or Jewelwords, these particular variants of Runewords appear only in 3, 4, 5 or 6 socket words and will only appear on weapons and armors, not charms, rings or amulets. Furthermore, in the case of Gems, only standard, flawless and perfect gems may be used in Gemwords; chipped and flawed gems will not suffice. There are approximately 300 Gem/Jewel-words.

PLAYERS X COMMAND (bring it on!):

The syntax is "/players X" in v1.10 compared to "players X" in v1.09. Maximum player limit is 8.

Monsters on current players 8 are stronger that they used to be on players 127 in v4.4

Resistance increase is random for each resistance.

X	Health	Damage	Attack	Defense	Resistances	Speed	Exp
2	+300%	+100%	+100%	+100%	+1 to +7	+10%	+100%
3	+700%	+200%	+200%	+200%	+2 to +14	+20%	+200%
4	+1200%	+300%	+300%	+300%	+3 to +21	+30%	+350%
5	+1800%	+400%	+400%	+400%	+4 to +28	+40%	+550%
6	+2500%	+500%	+500%	+500%	+5 to +35	+50%	+800%
7	+3300%	+600%	+600%	+600%	+6 to +42	+60%	+1100%
8	+4200%	+700%	+700%	+700%	+7 to +49	+70%	+1500%

HIRELINGS (good help is hard to find...):

Newly hired mercenaries will use their basic skill most frequently. With each level they gain the chance to use other skills will increase.

Hirelings have the following skills:

rill elligs have the following skills.				
Hireling	Basic skill	First skill	Second skill	
Act 1 Fire	Normal attack	Fire Arrow	Immolation Arrow	
Act 1 Cold	Normal attack	Cold Arrow	Freezing Arrow	
Act 2 Combat	Normal attack	Jab	Vengeance	
Act 2 Offense	Normal attack	Jab	Might aura	
Act 2 Defense	Normal attack	Jab	Defiance aura	
Act 3 Cold	Ice Bolt	Ice Blast	Glacial Spike	
Act 3 Fire	Fire bolt	Fire Ball	Meteor	
Act 3 Lightning	Charged bolt	Lightning	Chain Lightning	
Act 5 All	Normal attack	Stun	Whirlwind	

STATS (so many choices...): Strength is required to equip most armor and weapon (and only elite items can gave 6 sockets). Strength also boosts physical damage of most weapons (as it did in vanilla D2). Strength boosts skill physical damage that do not use weapon damage (Teeth, Volcano, etc) by 1% / 4 str **Dexterity** is required to equip some weapons. Dexterity boosts physical damage of ranged weapons and some melee weapons (as it did in vanilla D2). Dexterity affects block chance (as it did in vanilla D2). Dexterity past 100 increases damage and magic damage reduction by 1 point / 4 dex (a player with 300 dex would have (300 - 100) / 4 = 50 dmg reductions).Vitality increases health (as it did in vanilla D2). Vitality greatly affects healing potion effectiveness. **Vitality** increases health by 1% / 8 vit. Vitality boosts health regeneration by 1 point / 8 vit. Energy increases mana (as it did in vanilla D2). Energy greatly affects mana potion effectiveness. **Energy** increases mana by 1% / 8 enr. Energy boosts fire, cold, lightning and poison damage by 1% / 4 enr both for skill and weapon damage. Magic damage is boosted for skills only. It should be boosted for weapons as well but that part is bugged atm. NEW BASIC CUBE RECIPES (the easy stuff): In the following sections, there are several categories of Cube recipes that have been added. Just put the input ingredients in the Cube and hit the **Transform** button to get the output item. <same heal potion> x 3 -> <heal potion> next higher <same mana potion> x 3 -> <mana potion> next higher <super heal potion> + <super mana potion> -> <rejuv potion> <rejuv potion> x 3 -> <Full rejuv potion> <Arrow guiver> x 2 -> <Bolt guiver> (applies to Normal missiles, Poison Quills and Magic Missiles) <Bolt quiver> x 2 -> <Arrow quiver> (applies to Normal missiles, Poison Quills and Magic Missiles) <Wirt's Leg> + <Town Portal Book> -> Cow Portal OR <Elixir> x 6 + <Town Portal Book> -> Cow Portal <same Rune> x 3 -> <Rune> next higher (works all the way up to Zy - yes, I've renamed the Zod rune to Zy.) <same Gem> x 3 -> <Gem> next higher quality (3 chipped Gems -> 1 flawed Gem of same Gem type) <same Gem> x 9 -> <Gem> two steps higher quality (9 chipped Gems - 1 standard Gem of same Gem type) <1 of each Gem type> -> <Skull> same quality (1 of each chipped Gem -> 1 chipped Skull) <same Rune> x 2 + <Elixir> -> Rune next higher (this too works all the way up to Zy!) <same Gem> x 2 + <Elixir> -> Gem next higher quality (works all the way up to Perfect gems) <any Item> + <Zy Rune> -> same <Item> indestructible (great for eliminating repair costs on those crafted items) <any Thrown Weapon> + <Zy Rune> -> same <Item> + Replenish great for restoring thrown <any Set Item> x 3 -> random <Rune> (can be any random rune, even Zy!) <Demon Box> + <minor Mana potion> -> random <standard Gem> < Full Rejuvenation potion> x 3 + < perfect Gem> x 3 -> Elixir (if you can't find an Elixir, make it) <Demon Box> x 3 + <perfect Gem> x 3 + <Elixir> x 3 -> <Demon Key> (Demon Key without having to kill a Demon) <any chipped Gem> x 6 -> random <flawed Gem> great way to clean up your inventory of those random gem) <any flawed Gem> x 6 -> random <standard Gem> <any standard Gem> x 6 -> random <flawless Gem> <any flawless Gem> x 6 -> random <perfect Gem> <same Rune> x 3 + <same Rune+1> x 2 -> <Rune+2> (eq. <El Rune> x 3 + <Eld Rune> x 2 - <Tir Rune>) <same Rune> x 6 + <same Rune+1> -> <Rune+2>

<same Rune> x 3 + <same Rune+1> x 2 + <same Rune+2> x 2 -> <Rune+3>
<same Rune> x 6 + <same Rune+1> + <same Rune+2> x 2 -> <Rune+3>

<same Rune> x 9 -> <Rune+2> (eg. <El Rune> x 9 -> <Tir Rune>)

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UPGRADE ITEM RECIPES (upgrade item types):
These recipes upgrade the item type of the input items to an item of higher quality with new attributes. Often,
you have to sacrifice 3 or 6 of a base item plus a few trinkets to get 1 improved item. You may even have to sacrifice an
Elixir! Please note that these recipes will generate new items with new attributes.
<mag Ring> × 3 -> new <mag Amulet>
<mag Amulet> x 3 -> new <mag Ring>
<rar Ring> x 3 -> new <rar Amulet>
<rar Amulet> x 3 -> new <rar Ring>
<crf Ring> x 3 -> new <crf Amulet>
<crf Amulet> x 3 -> new <crf Ring>
<uni Ring> x 3 -> new <uni Amulet>
<uni Amulet> x 3 -> new <uni Ring>
<mag Ring> + <mag Amulet> -> new <mag Jewel>
<rar Ring> + <rar Amulet> -> new <rar Jewel>
<crf Ring> + <crf Amulet> -> new <crf Jewel>
<uni Ring> + <uni Amulet> -> new <uni Jewel>
How to upgrade Non-Magic Items:
<low-quality Item> + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <nor Item> (Can we fix it? Yes, we can!)
<cracked Item> + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <nor Item>
<crude Item> + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <nor Item>
<ethereal Item> + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <nor Item>
<normal Item> + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <superior Item>
<normal Charm> x 9 + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <mag Charm> (the easy way!)
<superior Item> + <rar Ring> + <rar Amulet> + <rar Jewel> -> new <mag Item>
<normal Charm> + <rar Ring> + <rar Amulet> + <rar Jewel> -> new <mag Charm> (Charms are special!)
How to make better Cube Scrolls:
<Common Cube Scroll> x 9 -> new <Uncommon Cube Scroll>
<Uncommon Cube Scroll> x 9 -> new <Secret Cube Scroll>
<Secret Cube Scroll> x 9 -> new <Arcane Cube Scroll>
<Common Cube Scroll> x 8 + <Elixir> -> new <Uncommon Cube Scroll>
<Uncommon Cube Scroll> x 8 + <Demon Box> -> new <Secret Cube Scroll>
<Secret Cube Scroll> x 8 + < Demon Key> -> new <Arcane Cube Scroll>
<Common Cube Scroll > x 7 + <Elixir > x 2 -> new <Uncommon Cube Scroll >
<Uncommon Cube Scroll> x 7 + < Demon Box> x 2 -> new <Secret Cube Scroll>
<Secret Cube Scroll> x 7 + < Demon Key> x 2 -> new <Arcane Cube Scroll>
<Common Cube Scroll > x 6 + <Elixir > x 3 -> new <Uncommon Cube Scroll >
<Uncommon Cube Scroll> x 6 + < Demon Box> x 3 -> new <Secret Cube Scroll>
<Secret Cube Scroll> × 6 + < Demon Key> × 3 -> new <Arcane Cube Scroll>
<Common Cube Scroll > x 5 + <Elixir > x 4 -> new <Uncommon Cube Scroll >
<Uncommon Cube Scroll> \times 5 + < Demon Box> \times 4 -> new <Secret Cube Scroll>
<Secret Cube Scroll> x 5 + < Demon Key> x 4 -> new <Arcane Cube Scroll>
How to make Rare Items (must be same mag Item - ie 3 mag Handaxes or 3 mag Leather armors):
<mag Ring> x 6 -> new <rar Ring> OR <mag Ring> + <Hel Rune> -> new <rar Ring>
<mag Amulet> × 6 -> new <rar Amulet> OR <mag Amulet> + <Ko Rune> -> new <rar Amulet>
<mag Jewel> × 6 -> new <rar Jewel> OR <mag Jewel> + <Hel Rune> -> new <rar Jewel>
<mag Charm> × 6 + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <rar Charm> (Charm size matters**)
<mag Weapon> x 3 + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <rar Weapon>
<mag Armor> x 3 + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <rar Armor>
<mag Shield> × 3 + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <rar Shield>
```

```
How to make Crafted Items (must be same rar Item - ie 3 rare Shortswords):
<rar Ring> x 6 + <rar Jewel> -> new <crf Ring>
<mag Ring> + <rar Jewel> + <Hel Rune> × 3 -> new <crf Ring>
<rar Amulet> x 6 + <rar Jewel> -> new <crf Amulet>
<mag Amulet> + <rar Jew> + <Ko Rune> x 3 -> new <crf Amulet>
<rar Jewel> x 6 -> new <crf Jewel> OR <mag Jewel> + <Hel Rune> x 3 + <Elixir> -> new <crf Jewel>
<rar Charm> x 3 + <rar Ring> + <rar Amulet> + <rar Jewel> -> new <crf Charm> (Charm size matters**)
<rar Weapon> x 3 + <rar Ring> + <rar Amulet> + <rar Jewel> -> new <crf Weapon>
<rar Armor> x 3 +<rar Ring> + <rar Amulet> + <rar Jewel> -> new <crf Armor>
<rar Shield> x 3 + <rar Ring> + <rar Amulet> + <rar Jewel> -> new <crf Shield>
How to make smaller Charms from larger Charms (easier if you have a spare Elixir or Demon Key kicking around):
<nor Hex Chm> x 3 -> new <nor Tall Chm>
<nor Tall Chm> x 3 -> new <nor Quad Chm>
<nor Quad Chm> x 6 -> new <nor Narrow Chm>
<mag Hex Chm> x 3 -> new <mag Tall Chm>
<mag Tall Chm> x 3 -> new <mag Quad Chm>
<mag Quad Chm> x 3 -> new <mag Grand Chm>
<mag Grand Chm> \times 3 -> new <mag Large Chm>
<mag Large Chm> × 3 -> new <mag Small Chm>
<mag Small Chm> × 3 -> new <mag Narrow Chm>
<rar Hex Chm> x 3 -> new <rar Tall Chm>
<rar Tall Chm> x 3 -> new <rar Quad Chm>
<rar Quad Chm> x 3 -> new <rar Grand Chm>
<rar Grand Chm> x 3 -> new <rar Large Chm>
<rar Large Chm> x 3 -> new <rar Small Chm>
<rar Small Chm> x 3 -> new <rar Narrow Chm>
<crf Hex Chm> x 3 -> new <crf Tall Chm>
<crf Tall Chm> x 3 -> new <crf Quad Chm>
<crf Quad Chm> x 3 -> new <crf Grand Chm>
<crf Grand Chm> x 3 -> new <crf Large Chm>
<crf Large Chm> x 3 -> new <crf Small Chm>
<crf Small Chm> x 3 -> new <crf Narrow Chm>
<uni Hex Chm> x 3 -> new <uni Tall Chm>
<uni Tall Chm> x 3 -> new <uni Quad Chm>
<uni Quad Chm> x 3 -> new <uni Grand Chm>
<uni Grand Chm> x 3 -> new <uni Large Chm>
<uni Large Chm> x 3 -> new <uni Small Chm>
<uni Small Chm> x 3 -> new <uni Narrow Chm>
```

```
<mag Hex Chm> x 2 + <Elixir>-> new <mag Tall Chm>
<mag Tall Chm> x 2 + <Elixir>-> new <mag Quad Chm>
<mag Quad Chm> x 2 + <Elixir> -> <mag Grand Chm>
<mag Grand Chm> x 2 + <Elixir> -> <mag Large Chm>
<mag Large Chm> x 2 + <Elixir>-> <mag Small Chm>
<mag Small Chm> x 2 + <Elixir>-> <mag Narrow Chm>
<rar Hex Chm> x 2 + <Elixir>-> new <rar Tall Chm>
<rar Tall Chm> x 2 + <Elixir>-> new <rar Quad Chm>
<rar Quad Chm> x 2 + <Elixir>-> new <rar Grand Chm>
<rar Grand Chm> x 2 + <Elixir>-> new <rar Large Chm>
<rar Large Chm> x 2 + <Elixir>-> new <rar Small Chm>
<rar Small Chm> x 2 + <Elixir> -> new <rar Narrow Chm>
<crf Hex Chm> x 2 + <Elixir>-> new <crf Tall Chm>
<crf Tall Chm> x 2 + <Elixir>-> new <crf Quad Chm>
<crf Quad Chm> x 2 + <Elixir>-> new <crf Grand Chm>
<crf Grand Chm> x 2 + <Elixir>-> new <crf Large Chm>
<crf Large Chm> x 2 + <Elixir> -> new <crf Small Chm>
<crf Small Chm> x 2 + <Elixir> -> new <crf Narrow Chm>
<uni Hex Chm> x 2 + <DKey>-> new <uni Tall Chm>
<uni Tall Chm> x 2 + <DKey>-> new <uni Quad Chm>
<uni Quad Chm> x 2 + <DKey>-> new <uni Grand Chm>
<uni Grand Chm> x 2 + <DKey>-> new <uni Large Chm>
<uni Large Chm> x 2 + <DKey> -> new <uni Small Chm>
<uni Small Chm> x 2 + <DKey> -> new <uni Narrow Chm>
```

DOWNGRADE ITEM RECIPES (downgrade item types to Normal):

These recipes can be used to downgrade hi-quality, magic, rare, crafted, set and unique items. The purpose for doing this is to allow these items to be socketted and subsequently turned into runic items. As many have discovered, only Normal or Superior or Magic or Rare type items can be socketted with runewords. The generated normal item comes devoid of sockets. Unique, runic, crafted and set items will have re-rolled attributes. Do not use these recipes with items that have Runewords; you will not like the results!!! Here are the recipes to downgrade an item to normal:

```
<any hi-quality item> + <key> + <chp Gem> -> normal <item>
<any magic item> + <key> + <chp Gem> -> normal <item>
<any rare item> + <key> + <chp Gem> -> new <magic item>
<any crafted item> + <key> + <chp Gem> -> new <rare item>
<any set item> + <key> + <chp Gem> -> new <crafted item>
<any unique item> + <key> + <chp Gem> -> new <crafted item>
```

Why in the world would anyone want a lower quality rune? Well, runes are very expensive and sometimes you need a rune of one lower quality in order to complete a runeword - to make that all-important runic item!

Use the following recipe to reduce the quality of a rune or gem to previous rune/gem:

```
<any Rune> + <key> -> <Rune> previous
<any Gem> + <key> -> <Gem> lower quality
```

SOCKETING RECIPES (something better):

These recipes can add sockets to any item. These recipes work for weapons, armor, helmets, shields, gloves, belts, boots, charms, rings, amulets and thrown weapons. Flawless gems are now required ingredients. Jewel quality is now a required factor to consider for different item types.

```
<mag, nor, eth Item> + <flawless Gem> + <mag Jewel> -> add 1 socket to no socket item
<mag, nor, eth Item> + <flawless Gem> \times 2 + <mag Jewel> \times 2 -> add 2 sockets to no socket item
<mag, nor, eth Item> + <flawless Gem> x 3 + <mag Jewel> x 3 -> add 3 sockets to no socket item
<mag, nor, eth Item> + <flawless Gem> \times 4 + <mag Jewel> \times 4 -> add 4 sockets to no socket item
<mag, nor, eth Item> + <flawless Gem> 	imes 5 + <mag Jewel> 	imes 5 -> add 5 sockets to no socket item
<mag, nor, eth Item> + <flawless Gem> 	imes 6 + <mag Jewel> 	imes 6 -> add 6 sockets to no socket item
<rar Item> + <flawless Gem> + <rar Jewel> -> add 1 socket to no socket item
<rar Item> + <flawless Gem> x 2 + <rar Jewel> x 2 -> add 2 sockets to no socket item
<rar Item> + <flawless Gem> x 3 + <rar Jewel> x 3 -> add 3 sockets to no socket item
<rar Item> + <flawless Gem> 	imes 4 + <rar Jewel> 	imes 4 -> add 4 sockets to no socket item
<rar Item> + <flawless Gem> x 5 + <rar Jewel> x 5 -> add 5 sockets to no socket item
<rar Item> + <flawless Gem> x 6 + <rar Jewel> x 6 -> add 6 sockets to no socket item
<crf, uni, set Item> + <perfect Gem> + <crf Jewel> -> add 1 socket to no socket item
<crf, uni, set Item> + <perfect Gem> x 2 + <crf Jewel> x 2 -> add 2 sockets to no socket item
\langle crf, uni, set Item \rangle + \langle perfect Gem \rangle \times 3 + \langle crf Jewel \rangle \times 3 - \rangle add 3 sockets to no socket item
<crf, uni, set Item> + <perfect Gem> x 4 + <crf Jewel> x 4 -> add 4 sockets to no socket item
<crf, uni, set Item> + <perfect Gem> 	imes 5 + <crf Jewel> 	imes 5 -> add 5 sockets to no socket item
<crf, uni, set Item> + <perfect Gem> x 6 + <crf Jewel> x 6 -> add 6 sockets to no socket item
```

If an item already has sockets, use a higher numbered socket recipe to add more empty sockets. For example, if an item has one socket, use a three-socket recipe on it and two additional empty sockets will be added leaving the first socket intact with whatever is already in it!!! Recipes work all the way up to 6 sockets maximum. Makes your old items even better!!!

UNSOCKETING RECIPES (reclaim your goodies):

These recipes will either destroy the socketed gems / jewels making the base items socketable again or reclaim the socketed gems / jewels leaving the base item unusable.

```
<any Item with 1 socket> + <Elixir> -> <same Item with empty sockets>
<any Item with 2 socket> + <Elixir> x 2 -> <same Item with empty sockets>
<any Item with 3 socket> + <Elixir> x 3 -> <same Item with empty sockets>
<any Item with 4 socket> + <Elixir> x 4 -> <same Item with empty sockets>
<any Item with 5 socket> + <Elixir> x 5 -> <same Item with empty sockets>
<any Item with 6 socket> + <Elixir> x 6 -> <same Item with empty sockets>
<any Item with 1 socket> + <rar Jewel> -> <all socketed items>
<any Item with 2 socket> + <rar Jewel> x 2 -> <all socketed items>
<any Item with 3 socket> + <rar Jewel> x 3 -> <all socketed items>
<any Item with 4 socket> + <rar Jewel> x 4 -> <all socketed items>
<any Item with 5 socket> + <rar Jewel> x 5 -> <all socketed items>
<any Item with 6 socket> + <rar Jewel> x 5 -> <all socketed items>
<any Item with 6 socket> + <rar Jewel> x 6 -> <all socketed items>
<any Item with 6 socket> + <rar Jewel> x 6 -> <all socketed items></any Item with 6 socket> + <rar Jewel> x 6 -> <all socketed items>
```

UNIQUE ITEM REROLL RECIPES (something extra special):

These recipes allow players to re-roll for a new Unique item based on an existing Unique item. Ever find a Unique item that your character can't use? How many Nagelrings do you have? Well, now players can re-roll for a different Unique item in the hopes of obtaining one that can be of use. These recipes are not cheap - more akin to gambling for high level characters. There are two variations of these recipes.

The following recipe allows re-rolling for a Unique item based on generic item type:

```
<uni Weapon> + <Demon Box> + <Perfect Gem> x 3 + <Elixir> x 3 -> new <Uni Weapon>
```

- <uni Armor> + < Demon Box> + < Perfect Gem> x 3 + < Elixir> x 3 -> new < Uni Armor>
- <Uni Ring> + <Demon Box> + <Perfect Gem> x 3 + <Elixir> x 3 -> new <Uni Amulet>
- <uni Amulet> + < Demon Box> + < Perfect Gem> x 3 + < Elixir> x 3 -> new < Uni Ring>
- <Uni Jewel> + <Demon Box> + <Perfect Gem> x 3 + <Elixir> x 3 -> new <Uni Jewel>
- <Uni Charm> + <Demon Box> + <Perfect Gem> x 3 + <Elixir> x 3 -> new <Uni Charm> same as input Charm size
- <uni Ring> + <Uni Amulet> + <DBox> + <Perfect Gem> x 3 + <Elixir> x 3 + <El rune> -> new <Uni Small Charm>
- <Uni Ring> + <Uni Amulet> + <DBox> + <Perfect Gem> x 3 + <Elixir> x 3 + <Eld rune>-> new <Uni Large Charm>
- <uni Ring> + <Uni Amulet> + <DBox> + <Perfect Gem> x 3 + <Elixir> x 3 + <Tir rune>-> new <Uni Grand Charm>
- <uni Ring> + <Uni Amulet> + <DBox> + <Perfect Gem> x 3 + <Elixir> x 3 + <Nef rune>-> new <Uni Quad Charm>
- <uni Ring> + <Uni Amulet> + <DBox> + <Perfect Gem> x 3 + <Elixir> x 3 + <Eth rune>-> new <Uni Tall Charm>
- <uni Ring> + <Uni Amulet> + <DBox> + <Perfect Gem> x 3 + <Elixir> x 3 + <Ith rune>-> new <Uni Hex Charm>
- <Uni Ring> + <Uni Amulet> + <DBox> + <Perfect Gem> \times 3 + <Elixir> \times 3 + <Tal rune>-> new <Uni Narrow Charm>

Weapon can be any kind of weapon - melee or missile, generic or class-specific. Using a unique short sword, one could end up with a unique Amazon javelin or a Sorceress orb or a hyperion spear. Armor can be any kind of defensive armor worn on any part of the body. Using a unique belt, one could get a unique helmet or a Necro head or a Paladin's auric shield or chain boots or shadow plate.

For more precise results, players may opt to use the specific form of the recipe:

- <Unique Item> + <DKey> + <DBox> + <Perfect Skull> \times 3 + <Elixir> \times 3 -> new <Unique Item> of same item type
 OR
- <Uni Ring> + <Uni Amulet> + <DKey> + <DBox> + <Perfect Skull> \times 3 + <Elixir> \times 3 + <Rune> -> new <Unique</pre>
 Item> of same item type

where **Item** can be any of type orb, head, auric shield, primal helm, pelt, Amazon bow-spear-javelin, circlet, thrown knife, thrown axe, hammer, polearm, katar/claw, scepter, wand, staff, sword, mace, spear, axe, bow, crossbow, club, knife, javelin, ring, amulet, jewel, charm, belt, boot, glove, shield, torso or helm. For Charms, the output Unique Charm is the same size as the input Unique Charm. For Rings, the output is a random Unique Ring with an empty socket. For Amulets, the output is a random Amulet with an empty socket. For Jewels, the output is a truly Unique Jewel.

**For Charms, add a rune to the recipe as in the unfocused recipe to determine the exact charm type. The resulting Unique charm will have maximum empty sockets.

Got too many Unique Charms? You can opt to reduce your Unique Charms into Unique Rings, Amulets or Jewels. Use one of the following reduction re-roll recipes:

- <Unique Charm> + <Demon Box> + <Key> -> random <Unique Ring>
- <Unique Charm> + <Demon Box> + <Rune> -> random <Unique Amulet>
- <Unique Charm> + <Demon Box> + <Chipped Gem> -> random <Unique Jewel>
- where <Key> is an ordinary key; <Rune> is any Rune; <Chipped> is any chipped gem.

UNIQUE ITEM FIND RECIPES (something extra special):

These recipes generate unique items of the same input item type. Valid item types include: Boot, Glove, Torso, Helmet, Shield, Ring, Amulet, Belt, Knife, Sword, Mace, Axe, Club, Scepter, Maul, Hammer, Staff, Spear, Polearm, Bow, Crossbow, Thrown knife, Thrown axe, Katar, Wand, Orb, Claws, Preserved head, Primal helm, Pelt, Auric Shield, Ama Spear, Ama Javelin, Ama Bow, Circlet. With 700+ uniques, there's now something special for everyone. There's even a possibility of acquiring one of Zy-El's Artifacts . . . though unlikely! Bear in mind that the crafted source items must be of the same type but they don't have to be the same item specifically. So, you can put in a crafted sash, a crafted heavy belt and a crafted light belt and wind up with some form of unique belt!

```
<crf Item> x 3 + <perf Gem> x 3 + <Elixir> x 3 + <DKey> + <Zy Rune> + <El Rune> + <crf Jewel> x 3 -> Unique
Item (eg. Any 3 crafted Belts + 3 perf Gems + 3 Elixirs + DKey + Zy + El + 3 crafted Jewels -> a unique Belt)
<rar Ring> x 3 + <rar Amulet> x 3 + <perf Gem> x 3 + <rar Jewel> x 3 + <Elixir> -> Stone of Jordan (Yeah!)
```

```
To craft Unique Jewels: \langle crf \ Jewel \rangle \times 3 + \langle perf \ Gem \rangle \times 3 + \langle Elixir \rangle \times 3 - \rangle \langle uni \ Jewel \rangle
OR: \langle crf \ Jewel \rangle \times 6 - \rangle \langle uni \ Jewel \rangle
```

To craft Unique Arrows/Bolts: <mag Arrow/Bolt> x 3 + <perf Gem> x 3 + <Elixir> x 3 -> <uni Arrow/Bolt>

To craft Unique Charms: $\langle crf Charm \rangle \times 3 + \langle Demon Key \rangle + \langle perf Gem \rangle \times 3 + \langle Elixir \rangle \times 3 - \rangle \langle uni Charm \rangle$ (Note: the three input charms must be of the same size; the resulting output charm will be the same size as well)

QUEST ITEM RECIPES (for those who can't wait):

Tired of searching for those Quest items or leaving those minor Quests uncompleted? Well, here's another way to complete some of those quests and move on to the next Act. It still might be easier just to complete the quest, but if you got some spare stuff lying around - why not? (I hate unfinished business.)

Here are the recipes to generate Quest items:

```
<Town Portal Scroll> + <std Gem> + <rar Jewel> + <Elixir> -> Bark Scroll
<rar Kris> + <std Gem> + <rar Jewel> + <Elixir> -> Gidbinn
<rar Quarterstaff> + <std Gem> + <rar Jewel> + <Elixir> -> Horadric Staff
<Identify Scroll Tome> + <std Gem> + <rar Jewel> + <Elixir> -> Lam Esen's Tome
<rar Flail> + <std Gem> + <rar Jewel> + <Elixir> -> Kalim's Super Flail
<perf Gem> + <std Gem> + <rar Jewel> + <Elixir> -> Mephisto's Soulstone
<rar Maul> + <std Gem> + <rar Jewel> + <Elixir> -> Hellforge Hammer
<rar War Hammer> + <std Gem> + <rar Jewel> + <Elixir> -> Horadric Malus
<Full Rejuv Potion> + <std Gem> + <rar Jewel> + <Elixir> -> Malah's Thawing Potion
```

ETHEREAL ITEM RECIPES (modify item types to Ethereal):

These recipes can be used to modify normal, hi-quality, magic, rare, crafted, set, runic and unique items to be ethereal. Why the heck would you ever want an item to become Ethereal? As everyone knows, Ethereal items have limited durability and eventually break. However, Ethereal items also tend to have higher attributes than base items. Ideally, Ethereal weapons are best suited for hirelings who never break their equipment.

```
Here are the recipes to modify an item to be Ethereal:

<any hi-quality item> + key + <Elixir> -> Ethereal <item>
<any magic item> + key + <Elixir> -> Ethereal <item>
<any rare item> + key + <Elixir> -> Ethereal <item>
<any crafted item> + key + <Elixir> -> Ethereal <item>
<any set item> + key + <Elixir> -> Ethereal <item>
<any unique item> + key + <Elixir> -> Ethereal <item>
```

CUBE RECIPE LOCKS (retaining item attributes):

Cube Locks are used in crafting recipes to retain the attributes of the source input item while adding new crafted attributes. Most of the cube recipes mentioned in the following sections involve using the Horadric Cube to generate new items from existing input items. In other words, when crafting a new attribute to an item, its original attributes are normally re-rolled before adding the new attribute. However, Cube Locks force the output item to retain the attributes of the source input item.

To use a **Cube Lock**, just add it to the cube recipe in addition to the normal required ingredients. In some cases, a **Cube Lock** is not required to retain the existing input attributes – for example, the Mega-Load recipes.

Where to find **Cube Locks**? These items will not drop from monsters, nor can they be bought from vendors. **Cube Locks** can be created by the following cube recipe:

<Zy Rune> + <Perfect Gem> x 7 + <Elixir> x 7 ---> <Cube Lock>

Cube Locks can also be generated using Collectors. Yes, the cost is very high but the benefits well worth it if you find the "perfect" item and want to keep its precious attributes. Cube Locks may be used in combination with Cube Adders.

CUBE RECIPE ADDERS (multiplying crafted attributes):

Cube Adders are used in crafting recipes to multiply the effects of new crafted attributes. The use of Cube Adders may also be referred to as "Overloading" cube recipes. This mechanism replaces the previous nomenclature - all previous Overloaded cube recipes have been replaced by the use of Cube Adders.

Cube Adders have several variants, some more powerful than others. Each of these Adders is successively more powerful than the previous - Double, Triple, Quint, Deka and DoDeka. These Cube Adders will not be dropped by monsters nor sold by vendors but can be generated by the following recipes:

- <Zy-El Scroll Fragment> x 2 + <Demon Box> x 2 + <Perfect Skull> x 2 + <Elixir> x 2 ---> <Double Cube Adder>
- <Zy-El Scroll Fragment> x 3 + <Demon Box> x 3 + <Perfect Skull> x 3 + <Elixir> x 3 ---> <Triple Cube Adder>
- <Zy-El Scroll Fragment> x 5 + <Demon Box> x 5 + <Perfect Skull> x 5 + <Elixir> x 5 ---> <Quint Cube Adder>
- <Zy-El Scroll Fragment> \times 10 + <Demon Box> \times 10 + <Perfect Skull> \times 10 + <Elixir> \times 10 ---> <Deka Cube Adder>
- $\langle \text{Zy-El Scroll Fragment} \rangle \times 20 + \langle \text{Demon Box} \rangle \times 20 + \langle \text{Perfect Skull} \rangle \times 20 + \langle \text{Elixir} \rangle \times 20 --- \rangle \langle \text{DoDeka Cube Adder} \rangle$

where: <Zy-El Scroll Fragment> refers to any Zy-El scroll fragment, not necessarily the same fragment. A Double Cube Adder can be generated using Collectors.

Cube Adders can be combined with other Cube Adders to create more powerful versions, as follows:

- <Double Cube Adder> + <Triple Cube Adder> ---> <Quint Cube Adder>
- <Quint Cube Adder> x 2 ---> <Deka Cube Adder>
- <Deca Cube Adder> x 2 ---> <DoDeka Cube Adder>

To use a **Cube Adder**, just add one **Cube Adder** to the required input ingredients of a cube recipe and the added recipe attributes will be increased - **only ONE Cube Adder can be used at a time**. Each **Cube Adders** is successively more powerful than its predecessor and will add higher increments. So, a **Double Adder** will add +100% of new crafted attributes, a **Triple Adder** +200%, a **Quint** +400%, a **Deka** +900% and a **DoDeka** +1900%.

For some cube recipes, Cube Adders may be used in combination with Cube Locks. In other recipes, neither Cube Adders nor Cube Locks can be used. Please refer to the specific cube recipe sections for details.

ELIXIR RECIPES (something for quick fixes):

Elixirs can be used to generate items with a limited number of specific attributes.

The new crafted attributes are added to the source item. Source item level requirements are increased by 1.

Cube Locks or Cube Adders will not work with these recipes.

- <Elixir> + <Perf Skull> + <Boot> -> same Boot + add Thorn Damage
- <Elixir> + <Perf Skull> + <Shield> -> same Shield + add Armor Class
- <Elixir> + <Perf Skull> + <Belt> -> same Belt + add Life
- <Elixir> + <Perf Skull> + <Helm> -> same Helm + add Mana
- <Elixir> + <Perf Skull> + <Glove> -> same Glove + add Attack Rating
- <Elixir> + <Perf Skull> + <Ring> -> same Ring + add Gold Find
- <Elixir> + <Perf Skull> + <Amulet> -> same Amulet + add Magic Find

Elixirs can be also used to enhance Weapons damage:

```
<Elixir> + <Perf Diamond> + <Weapon> -> same Weapon + add magic dmg + 1 level req
```

- <Elixir> + <Perf Topaz> + <Weapon> -> same Weapon + add lightning dmg + 1 level req
- <Elixir> + <Perf Ruby> + <Weapon> -> same Weapon + add fire dmg + 1 level req
- <Elixir> + <Perf Sapphire> + <Weapon> -> same Weapon + add cold dmg + 1 level req
- <Elixir> + <Perf Emerald> + <Weapon> -> same Weapon + add poison dmg + 1 level req
- <Elixir> + <Perf Amethyst> + <Weapon> -> same Weapon + add normal dmg + 1 level req

Elixirs can be also used to enhance Torso Armor resistances:

```
<Elixir> + <Perf Diamond> + <Torso Armor> -> same Torso Armor + add magic resist + 1 level req
```

- <Elixir> + <Perf Topaz> + <Torso Armor> -> same Torso Armor + add lightning resist + 1 level req
- <Elixir> + <Perf Ruby> + <Torso Armor> -> same Torso Armor + add fire resist + 1 level reg
- <Elixir> + <Perf Sapphire> + <Torso Armor> -> same Torso Armor + add cold resist + 1 level req
- <Elixir> + <Perf Emerald> + <Torso Armor> -> same Torso Armor + add poison resist + 1 level req
- <Elixir> + <Perf Amethyst> + <Torso Armor> -> same Torso Armor + add normal dmg reduction + 1 level req
- <Elixir> + <Perf Skull> + <Torso armor> -> same Torso Armor + add magic dmg reduction + 1 level req

MEGA-LOAD ELIXIR RECIPES (something for big fixes):

The Elixir recipes can be Mega-loaded to produce THIRTY times the result of the regular Elixir recipe. All added effects are stacked on top of existing weapon attributes - no Cube Lock is required. Cube Adders will NOT work with this recipe.

Use the same recipes as above, except add a Zy-El Scroll.

```
<Zy-El Scroll> + <Elixir> + <Perf gem> + <Weapon> -> same <Item> + <Damage Bonus> * 3000% + 20 level req <Zy-El Scroll> + <Elixir> + <Perf gem> + <Torso> -> same <Item> + <Resist Bonus> * 3000% % + 20 level req
```

EXCEPTIONAL/ELITE RECIPES (making regular stuff better):

These recipes transform Regular items into their Exceptional equivalents and Exceptional items into their Elite versions. Exceptional and Elite items have higher strength and dexterity requirements. So, be careful when using these recipes. You may wind up with an item you can't use for a long while. Only Regular items can be used to transform into Exceptional items and only Exceptional items can be used to transform into Elite items. Take note that the source items can be of any quality. Input item quality has no bearing in these recipes. Got this cube recipe idea from MikeMayhem, but had to tweak it to fit this Mod.

To transform Regular items to Exceptional or Exceptional items to Elite, use the following recipes:

- <Regular Item> x 3 + <rar Ring> + <rar Amulet> + <rar Jewel> + <Perf Gem> -> <nor Exceptional Item>
- <Exceptional Item> x 3 + <crf Ring> + <crf Amulet> + <crf Jewel> + <Perf Skull> + <Elixir> -> <nor Elite Item>

For example, put in 3 Gloves, a rare ring, a rare amulet, a rare jewel and any perfect gem and the result will be a Normal Demonhide Glove. Afterwards, you can transform these Normal items to Magic items using the Upgrade recipe noted above.

CRAFTED RING & AMULET RECIPES (some nifty stuff):

Rings and Amulets can be enchanted with additional abilities as well. To begin, you must have a crafted Ring or crafted Amulet created using the Upgrade recipes mentioned above. Cube Locks and Cube Adders may NOT be used with these recipes for crafted rings/amulets. Once you have a crafted Ring/Amulet, it can be enchanted with hit/gethit skill attributes using one of these recipes:

- <Crafted Ring> + <gem> + <jewel> + <Elixir> -> new <Crafted Ring> with hit skill
- <Crafted Amulet> + <gem> + <jewel> + <Elixir> -> new <Crafted Amulet> with get hit skill

where: <gem> determines the elemental attack type and the quality of the gem also determines the attack level.

<jewel> quality determines the chance of activation - 3% for Mag jewel and 5% for Rare, 7% for Crafted and 10% for Unique for Rings (4%, 7%, 10% and 14% for Amulets).

For example, a crf Ring with flawless topaz, rare jewel and Elixir will yield a new crafted Ring with a level 15 lightning get-hit skill that activates on a 5% chance after a successful hit against a target. Amulets are similar except that they activate when character is hit by enemy attacks.

Replace the **<jewel>** with a **<Demon Key>** + **<Demon Box>** for even more vicious skill combos!!! **Beware! Any use of a Demon Keys comes at a price**.

And the demonic (Demon Key + Box) recipe is:

- <Crafted Ring> + <gem> + <Demon Key> + <Demon Box> + <Elixir> -> new <Crafted Ring> with hit skill
- <Crafted Amulet> + <gem> + <Demon Key> + <Demon Box> + <Elixir> -> new <Crafted Amulet> with get hit skill

CRAFTED CHARM RECIPES (more good stuff):

Charms can be enchanted with limited Gem abilities. Charm size does not matter. The added abilities are derived from those pertaining to weapon, armor and shield bonuses that the gem normally gives. Cube Locks and Cube Adders will NOT work with these recipes.

Use one of the following recipes:

- <Crafted charm> + <stnd Gem> + <mag Ring> + <mag Amulet> -> new <Crafted charm> + <Gem abilities>
- <Crafted charm> + <flwls Gem> + <rar Ring> + <rar Amulet> -> new <Crafted charm> + <Gem abilities>
- <Crafted charm> + <perf Gem> + <crf Ring> + <crf Amulet> -> new <Crafted charm> + <Gem abilities>

where: < Gem abilities> = inherent abilities given when gem is socketed in an item

For example, cubing a crafted charm with a standard sapphire, magic ring and magic amulet will add 3-6 cold damage, +20 mana and +15 resist cold. Substitute the gem with a standard topaz and the recipe will add 5-20 fire damage, +20 hp and +15 resist fire. Look familiar? Crafted charms can also be socketed, but only one socket. This recipe will always generate a charm with new random abilities plus the added crafted abilities.

CRAFTED ITEM RECIPES (the good stuff):

These recipes are generic formulas that allow players to add special non-gem abilities to Crafted items. Can make very powerful items but also very expensive to repair. Spell charges are also very costly. ONLY CRAFTED ITEMS CAN BE ENCHANTED WITH THESE RECIPES - not Magic, Rare, Runic, Unique or Set items. The recipes only work for items of type: Weapons, Torsos, Helmets, Gloves, Belts and Boots (NOT Rings, Amulets, Jewels or Charms - crafting these items is covered in other sections).

You must first create a Crafted item using the How to make Crafted Item Recipes above. Once you have a <Crafted Item> it can be enchanted with abilities and/or spell charges. Crafted items require minimum character about level 30 to use.

The cube formula for enchanting Crafted items is as follows:

- <Crafted Item> + <Stnd Gem> + <mag Ring> + <mag Amulet> + <Key> --> new <Crafted Item> + <added ability>
 <Crafted Item> + <Flwls Gem> + <rar Ring> + <rar Amulet> + <Key> --> new <Crafted Item> + <added ability>
 <Crafted Item> + <Perf Gem> + <crf Ring> + <crf Amulet> + <Key> --> new <Crafted Item> + <added ability>
 <Crafted Item> + <Perf Gem> + <uni Ring> + <uni Amulet> + <Key> --> new <Crafted Item> + <added ability>
- < Crafted Item> any Crafted item of type belt, helm, weapon, armor, glove, boot or shield
- <added ability> either spell charges or an attack form or stat bonus depending on the Gem type
- < Key > just a single, ordinary key

The specific ability and level will vary for each combination of ingredients. For example, cubing a crafted full helm, a flawless sapphire, a rare ring and a rare amulet will produce a new crafted full helm with up to 24 charges of Dire Wolf XVI. A pair of crafted heavy boots with a standard diamond, magic ring, and magic amulet will produce a new crafted heavy boot with fast run/walk speed. A crafted heavy boot with flawless diamond, rare ring and rare amulet will produce a new crafted boot with faster run/walk speed. The higher quality items and ingredients will add higher level abilities.

Please note that each time the above recipes are used, a **NEW** crafted item is created. The new crafted item will have some randomly determined attributes in addition to the **<added ability>** granted by this cube recipe.

Want to retain the existing attributes of the source item? Use a Cube Lock and the output item will retain the attributes of the original source Crafted item with the <added ability>. These recipes will not work with Cube Adders.

The cube formula for enchanting Crafted items while retaining original attributes are:

- <Crf Item> + <Stnd Gem> + <mag Ring> + <mag Amulet> + <Key> + <CubeLock> --> same <Crf Item> + <add ability> + 5 level req
- <Crf Item> + <Flwls Gem> + <rar Ring> + <rar Amulet> + <Key> + <Cube Lock> --> same <Crf Item> + <add
 ability> + 10 level req
- <Crf Item> + <Perf Gem> + <crf Ring> + <crf Amulet> + <Key> + <Cube Lock> --> same <Crf Item> + <add ability> + 15 level req
- <Crf Item> + <Perf Gem> + <uni Ring> + <uni Amulet> + <Key> + <Cube Lock> --> same <Crf Item> + <add ability> + 20 level req

What are all the abilities and combinations? You'll have to find them out for yourself. There's a different result for each combination of Gem type and Item types. Gem, ring and amulet ingredient qualities determine the attribute level of effectiveness. Better ingredients, higher level attributes added. These recipes will not work with Cube Adders.

DEMON ITEM RECIPES (the real nasty stuff):

Demon items are items imbued with one or more demon spirits. These spirits are captured in Demon Keys. The Cube enchanting binds the demon(s) to the base item. Demon items are very powerful but have an exacting toll on the user. There are three levels of Demon items: Minor, Major and Trinity. Carrying too many Demon items can be very "draining". Cube Locks and Cube Adders will NOT work with these recipes.

Use one of the following Cube recipes to create Demon Items:

- <any Item> + <Perf Gem> + <Demon Key> + <Elixir> -> new <mag Minor Demon Item> + <attbs> + <penalties>
- <any Item> + <Perf Gem> + <Demon Key> \times 2 + <Elixir> \times 2 -> new <rar Major Demon Item> + <attbs> +
 <penalties>
- <any Item> + <Perf Gem> + <Demon Key> x 3 + <Elixir> x 3 -> new <crf Trinity Demon Item> + <attbs> +
 <penalties>

where:

- <any Item> means any item of type weapon, armor, shield, belt, glove, boot, helmet, ring or amulet; item quality doesn't matter
- <a href="<a href=" Attack. Torso Armors gain armor class and elemental resistances. Shields gain block speed and armor class. Belts grant reduced damage taken and reduced poison length. Gloves grant increased attack speed and inflict open wounds. Helms grant faster hit recovery and casting speed. Rings grant extra gold find and bonus to all skills. Amulets grant extra magic find and bonus to all skills. Class-specific items are granted additional class-specific bonuses."
- <penalties> include life regen drain, energy drain and vitality drain. Penalties are additive for additional Demon Items
 equipped. Don't rely too heavily on Demon Items; they'll be the death of you!

Minor Demon Items transform the base item into a Magic item. Major Demon Items transform the base item into a Rare item which has significantly higher drain penalties. And Trinity Demon Items are the ultimate in demonic weapons, harnessing the raw fury of three entrapped Demons in a Crafted item. Can even the most steadfast warrior be corrupted?

The Dark Side beckons! Use with extreme caution!

CRAFTED JEWEL RECIPES (neat stuff):

Crafted jewels can be enchanted with Rune abilities. To begin, you must have a crafted Jewel created using one of the Upgrade recipes. Because of the nature of crafted Jewels, they are very expensive to enchant. Unlike other items that can be enchanted, Jewels can be socketed into other items bestowing their abilities to the base item in the process. This can make for very, very powerful items.

Crafted Jewels can be enchanted with the following recipes:

```
<Crf Jewel> + <Rune> + <Elixir> + <mag Ring> -> new <Crf Jewel> + <Rune weapon attribute>
<Crf Jewel> + <Rune> + <Elixir> + <mag Amulet> -> new <Crf Jewel> + <Rune armor attribute>
<Crf Jewel> + <Rune> + <Elixir> + <mag Charm> -> new <Crf Jewel> + <Rune shield attribute>
```

<Rune> can be any Rune from El to Zy; <Rune attributes> item-type bonus for Rune abilities
This recipe will create a new crafted Jewel with regenerated attributes and the Rune abilities added onto it.

```
Yes, there is a stacking recipe that will retain the attributes of the original crafted Jewel - use a Cube Lock:

<Crf Jewel> + <Rune> + <Elixir> + <Cube Lock> + <mag Ring> -> same <Crf Jewel> + <weapon attribs>

<Crf Jewel> + <Rune> + <Elixir> + <Cube Lock> + <mag Amulet> -> same <Crf Jewel> + <armor attribs>

<Crf Jewel> + <Rune> + <Elixir> + <Cube Lock> + <mag Charm> -> same <Crf Jewel> + <shield attribs>
```

These recipes are very expensive but also give high level players the ability to create infinitely powerful items that can be programmed in whatever way they want. Because Jewels are a one-shot deal, players have to be very selective about which sockets to place them into.

Crafted jewels can be further enhanced by using a rare item and a Cube Adder to increase the added attributes:

```
<Crf Jewel> + <Rune> + <Elixir> + <Cube Adder> + <rar Ring> -> new <Crf Jewel> + <weapon attribs> x <Mult>
<Crf Jewel> + <Rune> + <Elixir> + <Cube Adder> + <rar Amulet> -> new <Crf Jewel> + <armor attribs> x <Mult>
<Crf Jewel> + <Rune> + <Elixir> + <Cube Adder> + <rar Charm> -> new <Crf Jewel> + <shield attribs> x <Mult>
```

<Cube Adder> is Double, the attribute multiplier <Mult> = 200%; Triple, <Mult> = 300%; Quint, <Mult> = 500%; Deka, <Mult> = 1000% and DoDeka, <Mult> = 2000%;

Combine a Cube Lock and a Cube Adder to retain the Crafted Jewel's original attributes as well as multiplying the enhanced attributes! This will also increase jewel level requirements: Double adds +2; Triple adds +3; Quint adds +5; Deka adds +10 and DoDeka adds +20 to level requirements

MEGALOAD CRAFTED JEWEL RECIPES (really neat stuff):

Crafted jewels can be mega-enhanced using these Mega-loaded versions of the Crafted Jewel Recipes. The key ingredient required is a <Zy-El Scroll>. Cube Locks and Cube Adders will NOT work with these recipes.

```
<Crf Jewel> + <Rune> + <Zy-El Scroll> + <crf Ring> -> same <Crf Jewel> + <weapon attrib> \times 3000% + 40 level requirements
```

- <Crf Jewel> + <Rune> + <Zy-El Scroll> + <crf Amulet> -> same <Crf Jewel> + <armor attrib> \times 3000% + 40 level requirements
- <Crf Jewel> + <Rune> + <Zy-El Scroll> + <crf Charm> -> same <Crf Jewel> + <shield attrib> \times 3000% + 40 level requirements

MAGIC MISSILE RECIPES (magic arrows and bolts):

Magic arrow and bolt quivers can be enchanted with elemental and other special attack forms. Remember, you only have a limited number of shots. If you fire off the last missile, the enchanted quiver disappears. Auto-replenishing arrows/bolts do NOT apply to magic quivers. Auto-replenish will NEVER appear as an attribute on magic quivers. Kato has no intention of ever making this possible.

It is still possible to replenish your magic quivers, but at a cost. There are two methods to replenishing magic missile quivers. Partial quivers of magic arrows/bolts can be sold to vendors who do NOT sell magic arrows to begin with and then buy back the same magic missiles in a full quiver. In other words, to replenish magic quivers, sell back the partial quivers to any vendor other than Charsi, Fara, Hralti, Halbu or Larzuk; selling magic quivers to any of these vendors will result in the quiver disappearing from the inventory altogether – it cannot be recovered. The advantage to using the vendor buyback method to replenish magic quivers is that the unique attributes are retained; however, the cost in gold can sometimes be prohibitive.

WARNING: some magic arrows/bolts may come with sockets; if the sockets are filled, these quivers cannot be replenished, ever - by any means. Once a magic quiver receives a gem or jewel in any of its sockets, it can NEVER be replenished with the same attributes.

The second method of replenishing magic quivers is to re-roll their attributes using the following recipes:

```
<Mag Qvr> + <Gem> -> new <Mag Qvr> + <Elem Dmg>
```

```
<Mag Qvr> + <Rune> -> new <Mag Qvr> + <Run Weapon>
```

where: < Mag Qvr> Magic arrow/bolt guivers that can be purchased from the local arms merchant.

- <Gem> can be any gem type, including chipped!
- <Rune> can be any rune
- <Elem Dmg> higher quality gems yield more damage as determined by gem type
- <Run Weapon> bonus to weapons as bestowed by the rune used

When these recipes are used, not only are the attributes of the <Mag Qvr> re-rolled, the number of missiles is also restored to a FULL quiver of 500. The <Mag Qvr> will always come with a few random attributes in addition to the fixed attributes as determined by the input gem or rune. So, if you're running low of magic arrows, throw the partial quiver into the cube along with any spare gem or rune you have and Transmute. You'll get a full quiver of new magic arrows!!! The disadvantage to this method is that the previous attributes of the input <Mag Qvr> will be lost.

If you wish to retain the existing attributes of a <Mag Qvr>, add a Cube Lock to the recipes like so:

```
<Mag Qvr> + <Gem> + <Cube Lock> -> same <Mag Qvr> + <Elem Dmg> + <level requirements>
```

```
<Mag Qvr> + <Rune> + <Cube Lock> -> same <Mag Qvr> + <Run Weapon>> + <level requirements>
```

Magic arrow and bolt quivers can be further enchanted with more powerful effects. Use of Cube Adders in the crafting recipe can greatly increase the effects of the added attributes.

```
<Mag Qvr> + <Gem> + <Cube Adder> -> new <Mag Qvr> + <Elem Dmg> * <Mult> + <level requirements>
```

```
<Mag Qvr> + <Rune> + <Cube Adder> -> new <Mag Qvr> + <Run Weapon> * <Mult> + <level requirements>
```

where: <Cube Adder> is Double, the attribute multiplier <Mult> = 200%; Triple, <Mult> = 300%; Quint, <Mult> = 500%; Deka, <Mult> = 1000% and DoDeka, <Mult> = 2000%;

<level requirements> Double adds +2; Triple adds +3; Quint adds +5; Deka adds +10 and DoDeka adds +20.

Please note that these recipes will **re-roll** the attributes of the **<Mag Qvr>** and then add the boosted gem or rune attributes. The random attributes are **NOT** overloaded - only the gem/rune effects. In order to **retain** the original attributes of the **<Mag Qvr>**, use a **Cube Lock**, which may be combined with a **Cube Adder**.

MEGALOAD MAGIC MISSILE RECIPES (convert magic missiles to slayer weapons):

Magic arrow and bolt quivers can be enchanted with slayer-like attributes through mega-load recipes. These recipes require the very hard to acquire <Zy-El Scroll> to complete. Why would anyone want to sacrifice such a prized item for a limited-fire weapon such as an arrow quiver? Well, only the very highest level characters will have the patience and the resources to assemble such a weapon. Possessing such a weapon would be a point of pride in itself.

```
<Mag Qvr> + <Gem> + <Zy-El Scroll> -> same <Mag Qvr> + <Elem Dmg> * 3000% + 40 level requirements
```

<Mag Qvr> + <Rune> + <Zy-El Scroll> -> same <Mag Qvr> + <Run Weapon> * 3000%% + 40 level requirements

Please note that Cube Locks are not required and Cube Adders will NOT work with these aforementioned recipes. CLASS SKILL ADDER RECIPES (something really good):

These recipes add Class skills bonuses to class-specific items. These items include: Druid Pelts, Barbarian Primal Helms, Amazon Bows, Amazon Spears, Amazon Javelins, Necro Voodoo Heads, Assassin Claws, Paladin Auric Shields and Sorceress' Orbs. The source item must also be a Crafted item. Please note that the Skill Adder bonuses are added to a new Crafted item; in other words, the previous attributes of the Crafted Class Item are lost! Be warned!! Cube Locks will NOT work with these recipes.

<Crafted Class Item> + <perf Gem> + <crf Ring> + <crf Amulet> + <crf Jewel> + <Elixir> -> new <Crafted Class
Item> with +1 Class Skill

Use a Cube Adder and increase the number of Skill levels added:

<Crafted Class Item> + <perf Gem> + <crf Ring> + <crf Amulet> + <crf Jewel> + <Elixir> + <Cube Adder> --->
new <Crafted Class Item> + Class Skills x <Mult>

where: <Cube Adder> is Double, the attribute multiplier <Mult> = 200%; Triple, <Mult> = 300%; Quint, <Mult> = 500%; Deka, <Mult> = 1000% and DoDeka, <Mult> = 2000%;

And a Mega-load Skill Adder recipe exists as well:

<Crafted Class Item> + <Zy-El Scroll> -> new <Crafted Class Item> with +30 Class Skills

Please note that this particular Mega-load recipe will generate a new item - all original attributes of the Crafted Class Item will be lost. You have been warned!!! Cube Locks will NOT work with these recipes.

SKILLTAB ADDER RECIPES (something just as good):

These recipes add bonuses to Skill Tabs within specific classes. These recipes are less expensive than the overall Class Skill Adder Recipes in that a crafted class specific item is NOT required. Rather, SkillTab Adder Bonuses can be bestowed on Crafted Rings or Crafted Amulets. Stated below is the generic formula and required elements for each specific Skill Tab:

<Crf Ring/Amulet> + <Elixir> + <Crf Jewel> + <Flwls Gem> + <Potion> -> new <Crf Ring/Amulet> + 1 SkillTab Bonus

where:

<flwls gem=""></flwls>	<potion></potion>	Skill Tab
Skull	Stamina	Amazon Bow & Crossbow
Skull	Thawing	Amazon Passive & Magic
Skull	Antidote	Amazon Spear & Javelin
Sapphire	Stamina	Sorceress Fire Spells
Sapphire	Thawing	Sorceress Lightning Spells
Sapphire	Antidote	Sorceress Cold Spells
Topaz	Stamina	Necromancer Curses
Topaz	Thawing	Necromancer Poison & Bone Spells
Topaz	Antidote	Necromancer Summoning Spells
Amethyst	Stamina	Paladin Combat
Amethyst	Thawing	Paladin Offensive
Amethyst	Antidote	Paladin Defensive
Emerald	Stamina	Barbarian Combat Skills
Emerald	Thawing	Barbarian Combat Masteries
Emerald	Antidote	Barbarian Warcries
Ruby	Stamina	Druid Summoning
Ruby	Thawing	Druid Shape Shifting
Ruby	Antidote	Druid Elemental Spells
Diamond	Stamina	Assassin Traps
Diamond	Thawing	Assassin Shadow Disciplines
Diamond	Antidote	Assassin Martial Arts

For example, a Crafted Ring combined with an Elixir, Crafted Jewel, Flawless Amethyst and an Antidote potion will result in the same Crafted Ring with an added +1 Skill bonus to all spells/skills in the Paladin's Defensive tree.

Players now have the flexibility to craft specific skill tab bonus items to suit their particular style of play. For example, a Necromancer specializing in Summons can fashion a crafted Ring or two with bonuses to all Necromancer Summoning Spells.

For players concerned with damage caps, boosting one skill branch while leaving other skill branches intact could be very handy. A Sorceress wanting to round out the damage of her elemental attacks may want to have skill bonuses to her Cold Spells. Now, she can create specific items that will enhance her Cold Spells without affecting the damages of her Fire and Lightning spells.

The SkillTab Bonus can be increased using a Cube Adder as in the recipe below:

<Crf Ring/Amu> +<Elixir> + <Crf Jewel> + <Flwls Gem> + <Potion> + <Cube Adder> ---> new <Crf Ring/Amu> +
SkillTab Bonus x <Mult>

where: **Cube Adder>** is **Double**, the attribute multiplier **Mult>** = 200%; **Triple**, **Mult>** = 300%; **Quint**, **Mult>** = 500%; **Deka**, **Mult>** = 1000% and **DoDeka**, **Mult>** = 2000%;

Please note that these recipes will re-roll the attributes of the source <Crf Ring/Amu> and then add the SkillTab Bonuses. Some or all of the existing attributes of the source <Crf Ring/Amu> will be lost! Be warned!!

SKILL ADDER RECIPES (something just as good):

These recipes add bonuses to a particular Skill/Spell. These bonuses apply to only a specific Skill/Spell and not any others. These recipes are slightly less expensive than the SkillTab Adder recipes in that a Crafted Class-specific item is NOT required: however, the addition of a rune is required to determine the exact bonus. Also, a Crafted Charm is required in order to receive the bonus. Listed below is the general cube formula accompanied by the required ingredients for each particular form of the recipe for each Skill/Spell:

<Crf Charm> + <Elixir> + <Perf Gem> + <Potion> + <Rune> -> new <Crf Charm> + 1 Skill Bonus

The Skill Bonus can be increased using a Cube Adder as in the recipe below:

<Crf Charm> + <Elixir> + <Perf Gem> + <Cube Adder> + <Potion> + <Rune> -> new <Crf Charm> + Skill Bonus x
<Mult>

where: <Cube Adder> is Double, the attribute multiplier <Mult> = 200%; Triple, <Mult> = 300%; Quint, <Mult> = 500%; Deka, <Mult> = 1000% and DoDeka, <Mult> = 2000%;

Please note that these recipes will re-roll the attributes of the source <Crf Charm> and then add the Skill Bonuses. Some or all of the existing attributes of the source <Crf Charm> will be lost! Be warned!!

For Amazon Skills, the required ingredients are:

<perf gem=""></perf>	<potion></potion>	<rune></rune>	Skill/Spell
Skull	Stamina	El	Magic Arrow
Skull	Stamina	Eld	Fire Arrow
Skull	Stamina	Tir	Cold Arrow
Skull	Stamina	Nef	Multiple Shot
Skull	Stamina	Eth	Exploding Arrow
Skull	Stamina	Ith	Ice Arrow
Skull	Stamina	Tal	Guided Arrow
Skull	Stamina	Ral	Strafe
Skull	Stamina	Ort	Immolation Arrow
Skull	Stamina	Thul	Freezing Arrow
Skull	Thawing	El	Inner Sight
Skull	Thawing	Eld	Critical Strike
Skull	Thawing	Tir	Dodge
Skull	Thawing	Nef	Slow Missiles
Skull	Thawing	Eth	Avoid

<perf gem=""></perf>	<potion></potion>	<rune></rune>	Skill/Spell
Skull	Thawing	Ith	Penetrate
Skull	Thawing	Tal	Dopplezon
Skull	Thawing	Ral	Evade
Skull	Thawing	Ort	Valkyrie
Skull	Thawing	Thul	Pierce
Skull	Antidote	El	Jab
Skull	Antidote	Eld	Power Strike
Skull	Antidote	Tir	Poison Javelin
Skull	Antidote	Nef	Impale
Skull	Antidote	Eth	Lightning Bolt
Skull	Antidote	Ith	Charged Strike
Skull	Antidote	Tal	Plague Javelin
Skull	Antidote	Ral	Fend
Skull	Antidote	Ort	Lightning Strike
Skull	Antidote	Thul	Lightning Fury

For Sorceress	Skills.	the	required	ingredients	are:
---------------	---------	-----	----------	-------------	------

			grealents are:
<perf gem=""></perf>	<potion></potion>	<rune></rune>	Skill/Spell
Sapphire	Stamina	El	Fire Bolt
Sapphire	Stamina	Eld	Warmth
Sapphire	Stamina	Tir	Inferno
Sapphire	Stamina	Nef	Blaze
Sapphire	Stamina	Eth	Fire Ball
Sapphire	Stamina	Ith	Fire Wall
Sapphire	Stamina	Tal	Enchant
Sapphire	Stamina	Ral	Meteor
Sapphire	Stamina	Ort	Fire Mastery
Sapphire	Stamina	Thul	Hydra
Sapphire	Thawing	El	Charged Bolt
Sapphire	Thawing	Eld	Static Field
Sapphire	Thawing	Tir	Telekinesis
Sapphire	Thawing	Nef	Nova
Sapphire	Thawing	Eth	Lightning
Sapphire	Thawing	Ith	Chain Lightning
Sapphire	Thawing	Tal	Teleport
Sapphire	Thawing	Ral	Thunder Storm
Sapphire	Thawing	Ort	Energy Shield
Sapphire	Thawing	Thul	Lightning Mastery
Sapphire	Antidote	El	Ice Bolt
Sapphire	Antidote	Eld	Frozen Armor
Sapphire	Antidote	Tir	Frost Nova
Sapphire	Antidote	Nef	Ice Blast
Sapphire	Antidote	Eth	Shiver Armor
Sapphire	Antidote	Ith	Glacial Spike
Sapphire	Antidote	Tal	Blizzard
Sapphire	Antidote	Ral	Chilling Armor
Sapphire	Antidote	Ort	Frozen Orb
Sapphire	Antidote	Thul	Cold Mastery

For Necromancer Skills, the required ingredients are:

ror Necromano	er Skills,	tne required	ingrealents are:
<perf gem=""></perf>	<potion></potion>	<rune></rune>	Skill/Spell
Topaz	Stamina	EI	Amplify Damage
Topaz	Stamina	Eld	Dim Vision
Topaz	Stamina	Tir	Weaken
Topaz	Stamina	Nef	Iron Maiden
Topaz	Stamina	Eth	Terror
Topaz	Stamina	Ith	Confuse
Topaz	Stamina	Tal	Life Tap
Topaz	Stamina	Ral	Attract
Topaz	Stamina	Ort	Decrepify
Topaz	Stamina	Thul	Lower Resist
Topaz	Thawing	El	Teeth
Topaz	Thawing	Eld	Bone Armor
Topaz	Thawing	Tir	Poison Dagger
Topaz	Thawing	Nef	Corpse Explosion
Topaz	Thawing	Eth	Bone Wall
Topaz	Thawing	Ith	Poison Explosion
Topaz	Thawing	Tal	Bone Spear
Topaz	Thawing	Ral	Bone Prison
Topaz	Thawing	Ort	Poison Nova
Topaz	Thawing	Thul	Bone Spirit
Topaz	Antidote	El	Skeleton Mastery
Topaz	Antidote	Eld	Raise Skeleton
Topaz	Antidote	Tir	Clay Golem
Topaz	Antidote	Nef	Golem Mastery
Topaz	Antidote	Eth	Raise Skeleton Mage
Topaz	Antidote	Ith	Blood Golem
Topaz	Antidote	Tal	Summon Resist
Topaz	Antidote	Ral	Iron Golem
Topaz	Antidote	Ort	Fire Golem
Topaz	Antidote	Thul	Revive

For Paladin Skills, the required ingredients are:

<perf gem=""></perf>	<potion></potion>	<rune></rune>	Skill/Spell
Amethyst	Stamina	El	Sacrifice
Amethyst	Stamina	Eld	Smite
Amethyst	Stamina	Tir	Holy Bolt
Amethyst	Stamina	Nef	Zeal
Amethyst	Stamina	Eth	Charge
Amethyst	Stamina	Ith	Vengeance
Amethyst	Stamina	Tal	Blessed Hammer
Amethyst	Stamina	Ral	Conversion
Amethyst	Stamina	Ort	Holy Shield
Amethyst	Stamina	Thul	Fist of Heavens
Amethyst	Thawing	El	Might
Amethyst	Thawing	Eld	Holy Fire
Amethyst	Thawing	Tir	Thorns
Amethyst	Thawing	Nef	Blessed Aim
Amethyst	Thawing	Eth	Concentration
Amethyst	Thawing	Ith	Holy Freeze
Amethyst	Thawing	Tal	Holy Shock

For Barbarian Skills, the required ingredients are:

<pre></pre>	<potion></potion>	<rune></rune>	Skill/Spell
Emerald	Stamina	El	Bash
Emerald	Stamina	Eld	Leap
Emerald	Stamina	Tir	Double Swing
Emerald	Stamina	Nef	Stun
Emerald	Stamina	Eth	Double Throw
Emerald	Stamina	Ith	Leap Attack
Emerald	Stamina	Tal	Concentrate
Emerald	Stamina	Ral	Frenzy
Emerald	Stamina	Ort	Whirlwind
Emerald	Stamina	Thul	Berserk
Emerald	Thawing	El	Sword Mastery
Emerald	Thawing	Eld	Axe Mastery
Emerald	Thawing	Tir	Mace Mastery
Emerald	Thawing	Nef	Pole Arm Mastery
Emerald	Thawing	Eth	Throwing Mastery
Emerald	Thawing	Ith	Spear Mastery
Emerald	Thawing	Tal	Increased Stamina

Amethyst	Thawing	Ral	Sanctuary
Amethyst	Thawing	Ort	Fanaticism
Amethyst	Thawing	Thul	Conviction
Amethyst	Antidote	El	Prayer
Amethyst	Antidote	Eld	Resist Fire
Amethyst	Antidote	Tir	Defiance
Amethyst	Antidote	Nef	Resist Cold
Amethyst	Antidote	Eth	Cleansing
Amethyst	Antidote	Ith	Resist Lightning
Amethyst	Antidote	Tal	Vigor
Amethyst	Antidote	Ral	Meditation
Amethyst	Antidote	Ort	Redemption
Amethyst	Antidote	Thul	Salvation

Emerald	Thawing	Ral	Iron Skin
Emerald	Thawing	Ort	Increased Speed
Emerald	Thawing	Thul	Natural Resistance
Emerald	Antidote	El	Howl
Emerald	Antidote	Eld	Find Potion
Emerald	Antidote	Tir	Taunt
Emerald	Antidote	Nef	Shout
Emerald	Antidote	Eth	Find Item
Emerald	Antidote	Ith	Battle Cry
Emerald	Antidote	Tal	Battle Orders
Emerald	Antidote	Ral	Grim Ward
Emerald	Antidote	Ort	War Cry
Emerald	Antidote	Thul	Battle Command

<perf gem=""></perf>	<potion></potion>	<rune></rune>	Skill/Spell
Ruby	Stamina	EI	Raven
Ruby	Stamina	Eld	Plague Poppy
Ruby	Stamina	Tir	Oak Sage
Ruby	Stamina	Nef	Summon Spirit Wolf
Ruby	Stamina	Eth	Cycle of Life
Ruby	Stamina	Ith	Heart of Wolverine
Ruby	Stamina	Tal	Summon Fenris
Ruby	Stamina	Ral	Vines
Ruby	Stamina	Ort	Spirit of Barbs
Ruby	Stamina	Thul	Summon Grizzly
Ruby	Thawing	EI	Werewolf
Ruby	Thawing	Eld	Shape Shifting
Ruby	Thawing	Tir	Werebear
Ruby	Thawing	Nef	Feral Rage
Ruby	Thawing	Eth	Maul
Ruby	Thawing	Ith	Rabies
Ruby	Thawing	Tal	Fire Claws
Ruby	Thawing	Ral	Hunger
Ruby	Thawing	Ort	Shock Wave
Ruby	Thawing	Thul	Fury
Ruby	Antidote	El	Firestorm
Ruby	Antidote	Eld	Molten Boulder
Ruby	Antidote	Tir	Arctic Blast
Ruby	Antidote	Nef	Eruption
Ruby	Antidote	Eth	Cyclone Armor
Ruby	Antidote	Ith	Twister
Ruby	Antidote	Tal	Volcano
Ruby	Antidote	Ral	Tornado
Ruby	Antidote	Ort	Armageddon
Ruby	Antidote	Thul	Hurricane

For Assassin Skills, the required ingredients are:

			edients dre.
<perf gem=""></perf>	<potion></potion>	<rune></rune>	Skill/Spell
Diamond	Stamina	El	Fire Blast
Diamond	Stamina	Eld	Shock Web
Diamond	Stamina	Tir	Blade Sentinel
Diamond	Stamina	Nef	Charged Bolt
			Sentry
Diamond	Stamina	Eth	Wake of Fire
Diamond	Stamina	Ith	Blade Fury
Diamond	Stamina	Tal	Lightning Sentry
Diamond	Stamina	Ral	Wake of Inferno
Diamond	Stamina	Ort	Death Sentry
Diamond	Stamina	Thul	Blade Shield
Diamond	Thawing	El	Claw Mastery
Diamond	Thawing	Eld	Psychic Hammer
Diamond	Thawing	Tir	Burst of Speed
Diamond	Thawing	Nef	Weapon Block
Diamond	Thawing	Eth	Cloak of Shadows
Diamond	Thawing	Ith	Fade
Diamond	Thawing	Tal	Shadow Warrior
Diamond	Thawing	Ral	Mind Blast
Diamond	Thawing	Ort	Venom
Diamond	Thawing	Thul	Shadow Master
Diamond	Antidote	El	Tiger Strike
Diamond	Antidote	Eld	Dragon Talon
Diamond	Antidote	Tir	Fists of Fire
Diamond	Antidote	Nef	Dragon Claw
Diamond	Antidote	Eth	Cobra Strike
Diamond	Antidote	Ith	Claws of Thunder
Diamond	Antidote	Tal	Dragon Tail
Diamond	Antidote	Ral	Blades of Ice
Diamond	Antidote	Ort	Dragon Flight
Diamond	Antidote	Thul	Phoenix Strike

CHARM OF MAKING (something amazing):

a special class of Charms that can be pre-programmed to a specific set of attributes to suit whatever situation the player deems necessary. Like any other type of charm, a **Charm of Making (ChoM)** must be present in the character's inventory in order to be active. Unlike other charms, the **Charm of Making cannot** be socketted. Unlike most charms, each **Charm of Making** will impose penalties upon the character using it - draining Strength, Dexterity, Vitality and/or Mana in various combinations and amounts depending on the nature of the Charm itself. Characters may carry more than one **Charm of Making** limited only by the availability of space in their inventory.

There are three classes of Charm of Making: Minor, Major and Mega. Each class has the same attributes but with successively higher degrees of magnitude. All Charm of Making can switch to one of several modes - each mode possesses a set number of attributes. This switching of modes is done through the Horadric Cube by inserting the Charm of Making and the appropriate gem or gems. Different classes require higher quality gems - Minor class require Chipped gems, Major class require Standard gems and the Mega require Perfect gems.

Changing modes for **ChoM**'s is relatively cheap. For example, put a **Minor ChoM** into the Horadric cube along with 2 x chipped Emeralds, press the Transmute button and you have a **ChoM** set to **Venom** mode. It does not matter what the current mode of the **ChoM** is when you put it in the Cube.

How to make a Charm of Making

- 3 x <Standard Gem> + 3 x <Elixir> + <rar Charm> + <rar Jewel>
- + 3 x < Common Cube Scroll> ---> < Minor Charm of Making>
- 3 x <Minor Charm of Making> + 3 x <Perfect Gem> + <crf Charm> + <crf Jewel>
- + 3 x < Uncommon Cube Scroll> ---> < Major Charm of Making>
- 3 × <Major Charm of Making> + 3 × <Perfect Skull> + <unq Charm> + <unq Jewel>
- + 3 x <Secret Cube Scroll> ---> <Mega Charm of Making>

Each successive level of **ChoM** includes all the attributes of the lower level **ChoM**'s plus an added attribute or two. While these items are not overpowering or as powerful as players can craft using other means in this mod, **ChoM**'s offer a greater flexibility to character development. For example, a Barbarian finds that he needs more offensive attributes, may initially use a **ChoM** set to **Destroyer** mode but later on discover that he needs more elemental resistance and switch the **ChoM** to **Defender** mode.

Some of the **ChoM** modes include limited spell charges. Removing the **ChoM** from the character's inventory will negate any lasting effects of the spell charges. For instance, the **Skull** mode has Summon Skeleton charges. If the **ChoM** is moved out of the inventory for any reason, any summoned creatures will be dispelled. If the **ChoM** runs out of charges, simply put the **ChoM** back into the **Horadric Cube** and put in the required gem(s) to regenerate the same mode as you had previously used and a random number of charges will be generated for each spell.

Listed below are the currently available modes for **ChoM**'s in this version of the mod. In later versions, additional modes may be created as Kato sees fit to do so. No attribute numbers have been included since these are likely to change. Besides, players should not be allowed to know everything - a sense of discovery is what keeps a mod fresh in players' minds.

Mode	Switch Gem	Attributes
Buzzer	Topaz x 2	+Lightning damage +Light radius +Resist Lightning
Crusader	Diamond x 3	+Attack vs Demons +Attack vs Undead +Damage vs Undead +Ignore AC +No Monster Heal +Normal Damage

Mode	Switch Gem	Attributes
Psycho	Diamond, Emerald, Ruby, Sapphire, Topaz	+Fire damage +Cold damage +Lightning damage +Poison damage +Weapon swing speed
Shield	Diamond	+Armor Class +Life +Reduce Damage

Defender	Diamond x 2	+Armor Class +Reduce Damage +Resist All +Hit Recovery +Half Freeze
Destroyer	Amethyst x 3	+Deadly Strike +Crushing Blow +Open Wounds +Normal Damage
Finder	Diamond, Topaz	+Extra gold +Magic find +All Skills
Flamer	Ruby x 2	+Fire damage +Open Wounds +Resist Fire
Healer	Emerald	+Resist All +Reduced poison duration +Regen Life +Regen Mana
Icer	Sapphire x 2	+Cold damage +Freeze target +Resist Cold
Master	Amethyst, Diamond	+All Skills +Strength +Dexterity +Vitality

Skull	Skull	+Summon Skeleton +Summon Mage Skeleton +Summon Golem
Slayer	Amethyst, Ruby	+Ignore AC +Crushing Blow +Magic Damage
Slogger	Sapphire	+Slow target +Freeze target +Target Flee +Blind target
Speed	Topaz x 3	+Run/Walk speed +Weapon swing speed +Spell cast speed +Block speed
Sponge	Ruby, Sapphire, Topaz	+Absorb Fire +Absorb Cold +Absorb Lightning +Dmg to Mana
Summoner	Skull, Diamond	+Summon Wolf +Summon Spirit +Summon Vine +Summon Raven
Venom	Emerald × 2	+Poison damage +Thorns +Resist Poison

ZY-EL SCROLLS (something hard to find):

+Energy

A <Zy-El Scroll> is an artifact which will never drop from any monster. However, fragments of these scrolls can be found from certain high-level monsters or through arcane means. A completed scroll can be assembled once an entire set of 7 fragments is transmuted within the Horadric Cube. Each fragment is numbered 1 through 7; one of each fragment must be placed into the Horadric Cube in order to successfully transmute into a <Zy-El Scroll>.

Not all fragments can be found in the same difficulty. The completion of a Scroll may require venturing to different difficulties and visiting different map levels. You will never find all the fragments just doing Cow runs - that's for sure. Only those who are worthy will be able to find all the fragments - a true quest to test the most stalwart heroes!

Only those who are worthy will be able to find all the fragments – a true quest to test the most stalwart heroes. Zy-El Scrolls can be used to generate random unique items:

<Zy-El Scroll> + <uni Jewel> + <Elixir> + <any Weapon, Armor, Charm, Ring, Amulet> -> random <unique Item> of same item type (Item quality does not matter! One side benefit - Unique item generated with come with maximum sockets!)

Zy-El Scrolls can be used to generate crafted items:

<Zy-El Scroll> + <crf Jewel> + <Elixir> + <any Weapon, Armor, Charm, Ring, Amulet> -> <crf Item> of same item type (Item quality does not matter! One side benefit - Unique item generated will come with maximum sockets! In the course of searching for Zy-El Scroll Fragments, you may come across more than one of the same numbered Fragment. What a pity! Players may sell Fragments to vendors for a chunk of change. Or, players may opt to re-roll a spare Fragment into a different Fragment using this recipe:

<Zy-El Scroll Fragment> + <perf Gem> + <Elixir> -> new <Zy-El Scroll Fragment>
(Beware though! The new Fragment may turn out to be the same numbered Fragment as the original. Randomness!!!)

ZY-EL ARTIFACTS RECIPES (something extra special):

Of course, there are Unique items specific to the Zy-El mod that can be had by players through these cube recipes. These items are extremely powerful and any player (especially an Assassin) equipped with two or three of these items can cause serious mayhem! These Artifacts are NOT Set items. There is no Set bonus bestowed by having more than one of these items equipped. Each Artifact is a standalone item capable of transforming any character into a minor god. As such, some of these items require a minimum character level of 240, others 255. Yes, you must have 3 Unique Jewels in order to complete the recipe:

 $\langle Zy-El \ Scroll \rangle + \langle Demon \ Key \rangle \times 3 + \langle uni \ Jewel \rangle \times 3 + Zy \ (rune33) + El \ (rune01) + \langle Crafted \ Item \rangle - \rangle ZY-EL$ Artifact

where the < Crafted Item> listed below will generate the named Unique item (some are Unknown and may change from version to version - only the Arcanes know for sure):

Zy-El's Requiem (Diadem)	Zy-El's Pride (Death Star)	Zy-El's Rage (Unknown)
Zy-El's Repose (Spiderweb Sash)	Zy-El's Cleavage (Colossal Sword)	Zy-El's Vengeance (Unknown)
Zy-El's Vise (Vambraces)	Zy-El's Finger (Shadow Bow)	Zy-El's Ransom (Unknown)
Zy-El's Stride (Mirrored Boots)	Zy-El's Edge (Hydra Edge)	Zy-El's Deceit (Unknown)
Zy-El's Embrace (Archon Plate)	Zy-El's Reach (Partizan)	Zy-El's Element (Unknown)
Zy-El's Decorum (Shadow Plate)	Zy-El's Recall (Decapitator)	Zy-El's Angst (Unknown)
Zy-El's Defense (Luna)	Zy-El's Spite (Unknown)	Zy-El's Afterthought (Unknown)
Zy-El's Memory (Ring)	Zy-El's Anthem (Unknown)	Zy-El's Suffrage (Unknown)
Zy-El's Legacy (Ring) - add a Key	Zy-El's Caress (Unknown)	Zy-El's Idea (Unknown)
Zy-El's Lament (Amulet)	Zy-El's Fury (Unknown)	Zy-El's Victory (Unknown)
Zy-El's Marker (Sm Charm)	Zy-El's Child (Unknown)	Zy-El's Quest (Unknown)
Zy-El's Mourning (Gorgon Crossbow)	Zy-El's Honor (Unknown)	Zy-El's Might (Unknown)
Zy-El's DeathSong (Bloodfang)	Zy-El's Promise (Unknown)	
Zy-El's WindSong (Winged Knife)	Zy-El's Strike (Unknown)	

REATTRIBUTE/RE-ROLL RECIPES:

These recipes regenerate attributes of magic, rare and crafted items and regenerate cube scrolls. Don't like the abilities on an item or the output of a cube scroll? Or maybe you goofed when you crafted an item with the wrong ingredients and want to start over again. Items include weapons, armors, rings, amulets and charms. Cube scrolls apply as listed.

```
<mag Item> + <mag Jewel> + <Elixir> -> new <mag Item>
<rar Item> + <rar Jewel> + <Elixir> -> new <rar Item>
<crf Item> + <crf Jewel> + <Elixir> -> new <crf Item>
<br/>
<Demon Box> x 3 -> new <Demon Box>
<br/>
<Demon Box> + <crf Jewel> + <Elixir> -> new <Demon Box>
<br/>
<Demon Box> + <crf Jewel> + <Elixir> -> new <Demon Box>
<br/>
<Common Cube Scroll> x 3 -> new <Common Cube Scroll>
<br/>
<Common Cube Scroll> + <mag Ring> + <mag Amulet> + <mag Jewel> -> new <Common Cube Scroll>
<br/>
<Uncommon Cube Scroll> x 3 -> new <Uncommon Cube Scroll>
<br/>
<Uncommon Cube Scroll> + <rar Ring> + <rar Amulet> + <rar Jewel> -> new <Uncommon Cube Scroll>
<br/>
<Secret Cube Scroll> x 3 -> new <Secret Cube Scroll>
<br/>
<Secret Cube Scroll> + <crf Ring> + <crf Amulet> + <crf Jewel> -> new <Secret Cube Scroll>
<br/>
<Arcane Cube Scroll> + <uni Ring> + <uni Amulet> + <uni Jewel> -> new <Arcane Cube Scroll>
```

```
ATTRIBUTE REDUCTION RECIPES (reduces specific attribute values):
These recipes can be used to reduce and remove specific attributes from items. Why would players want to do this?
Well, there is a built-in limitation with Diablo2 in which items can only have a maximum 44 lines of attributes. Any
additional attributes are ignored. Often, items come with attributes that are of no benefit to characters and it is better
to remove them. Each application of the reduction recipe will incrementally remove the attribute bonus. It may be
necessary to use the recipe more than once to completely remove the attribute line. Some of these recipes are very
costly. Attribute reduction is a very fine art of item sculpting apt for high level characters who wish to put the
final touches to prized items- pruning off useless attributes.
<any Item> + <Thaw potion> + <key> -> same <Item> - <Half Freeze>
<any Item> + <Cham Rune> + <Town Portal Scroll> -> same <Item> - <Cannot Be Frozen>
<any Item> + <Arrow> + <Bolt> + <key> -> same <Item> - <Exploding Arrows>
<any Item> + <Mal Rune> + <key> -> same <Item> - <Prevent Monster Heal>
<any Item> + <Sur Rune> + <key> -> same <Item> - <Blinds Target>
<any Item> + <flawed gem> + <Identify Scroll> -> same <Item> - <1 Class Level Bonus>
<any Item> + <standard gem> + <Identify Scroll> -> same <Item> - <3 Class Level Bonuses>
<any Item> + <flawless gem> + <Identify Scroll> -> same <Item> - <10 Class Level Bonuses>
where:
<gem> = Skull (Amazon), Amethyst (Paladin), Topaz (Necromancer), Sapphire (Sorceress), Emerald (Barbarian), Ruby
(Druid), Diamond (Assassin). An item which has +4 Sorceress skills would require one application of the recipe using a
standard Sapphire and a second application using a flawed Sapphire and Identify Scrolls to completely remove the
attribute.
<any Item> + <Stamina potion> + <key> -> same <Item> - <5 Reduced Stamina Drain>
<any Item> + <Stamina potion> x 2 + <key> -> same <Item> - <20 Reduced Stamina Drain>
<any Item> + <Stamina potion> x 3 + <key> -> same <Item> - <50 Reduced Stamina Drain>
<any Item> + <Antidote potion> + <key> -> same <Item> - <5% Ease>
<any Item> + <Antidote potion> x 2 + <key> -> same <Item> - <20% Ease>
<any Item> + <Antidote potion> x 3 + <key> -> same <Item> - <50% Ease>
<any Item> + <Cham rune> + <key> -> same <Item> - <1 Freeze Target>
<any Item> + <Cham rune> + <key> x 2 -> same <Item> - <5 Freeze Target>
<any Item> + <Cham rune> + <key> x 3 -> same <Item> - <50 Freeze Target>
<any Item> + <El rune> + <key> -> same <Item> - <1 Light Radius>
<any Item> + <El rune> x 2 + <key> -> same <Item> - <3 Light Radius>
<any Item> + <Tir rune> + <key> -> same <Item> - <1 Mana After Kill>
<any Item> + <Tir rune> x 2 + <key> -> same <Item> - <3 Mana After Kill>
<any Item> + <Dol rune> + <key> -> same <Item> - <1% Target Flees>
<any Item> + <Dol rune> + <key> x 2 -> same <Item> - <5% Target Flees>
<any Item> + <Dol rune> + <key> x 3 -> same <Item> - <20% Target Flees>
*** Note: must reduce Target Flees to 0% and then once more -1% to remove the attribute line.
<any Item> + <Eld rune> + <key> -> same <Item> - <1 Attack-vs-Undead>
<any Item> + <Eld rune> + <key> x 2 -> same <Item> - <5 Attack-vs-Undead>
<any Item> + <Eld rune> + <key> × 3 -> same <Item> - <20 Attack-vs-Undead>
<any Item> + <Eld rune> + <key> × 4 -> same <Item> - <100 Attack-vs-Undead>
<any Item> + <Ith rune> + <key> -> same <Item> - <1 Attack-vs-Demon>
<any Item> + <Ith rune> + <key> x 2 -> same <Item> - <5 Attack-vs-Demon>
<any Item> + <Ith rune> + <key> × 3 -> same <Item> - <20 Attack-vs-Demon>
<any Item> + <Ith rune> + <key> x 4 -> same <Item> - <100 Attack-vs-Demon>
<any Item> + <Amn rune> + <Key> -> same <Item> - <1 Attacker Takes Damage>
<any Item> + <Amn rune> + <Key> x 2 -> same <Item> - <5 Attacker Takes Damage>
<any Item> + <Amn rune> + <Key> x 3 -> same <Item> - <20 Attacker Takes Damage>
any Item> + <Amn rune> + <Minor Heal> -> same <Item> - <1 Attacker Takes Lightning Damage>
<any Item> + <Amn rune> + <Minor Heal> x 2 -> same <Item> - <5 Attacker Takes Lightning Damage>
<any Item> + <Amn rune> + <Minor Heal> x 3 -> same <Item> - <20 Attacker Takes Lightning Damage>
<any Item> + <Eth rune> + <Minor Heal> -> same <Item> - <1 Life Regen>
<any Item> + <Eth rune> + <Minor Heal> x 2 -> same <Item> - <5 Life Regen>
```

```
<any Item> + <Eth rune> + <Minor Heal> x 3 -> same <Item> - <20 Life Regen>
<any Item> + <Eth rune> + <Minor Heal> x 4 -> same <Item> - <100 Life Regen>
<any Item> + <Tal rune> + <Minor Heal> -> same <Item> - <1 Damage Reduced>
<any Item> + <Tal rune> + <Minor Heal> x 2 -> same <Item> - <5 Damage Reduced>
<any Item> + <Tal rune> + <Minor Heal> x 3 -> same <Item> - <20 Damage Reduced>
<any Item> + <Tal rune> + <Minor Heal> x 4 -> same <Item> - <100 Damage Reduced>
<any Item> + <Tal rune> + <Minor Mana> -> same <Item> - <1 Magic Damage Reduced>
<any Item> + <Tal rune> + <Minor Mana> x 2 -> same <Item> - <5 Magic Damage Reduced>
<any Item> + <Tal rune> + <Minor Mana> x 3 -> same <Item> - <20 Magic Damage Reduced>
<any Item> + <Tal rune> + <Minor Mana> x 3 -> same <Item> - <20 Magic Damage Reduced>
<any Item> + <Tal rune> + <Minor Mana> x 4 -> same <Item> - <100 Magic Damage Reduced>
<any Item> + <Tal rune> + <Minor Mana> x 4 -> same <Item> - <100 Magic Damage Reduced></any Item> + <Tal rune> + <Minor Mana> x 4 -> same <Item> - <100 Magic Damage Reduced>
```

DAMAGE REDUCTION RECIPES (reduces damage bonuses):

These recipes can be used to reduce and remove physical and elemental damage bonuses bestowed by items. Specifically, bonuses to Fire, Cold, Lightning, Poison and Physical damage can be reduced. If the bonus is reduced to zero, the entire damage attribute line is removed. Be careful not to incur negative bonuses as they will indeed subtract from the characters' damage capability.

```
the characters' damage capability.
<any Item> + <Gem> + <Antidote potion> -> same <Item> - <Max Damage Bonus>
where:
<Gem/Rune> type = <Gem> quality =
Ruby (Fire Max) Chipped (-1)
Topaz (Lightning Max) Flawed (-5)
Emerald (Poison Max) Standard (-20)
Sapphire (Cold Max) Flawless (-100)
Diamond (Physical Max) Perfect (-500)
Skull (Fire, Ltng, Cold, Poison, Phys Max)
<any Item> + <Gem> + <Thawing potion> -> same <Item> - <Min Damage Bonus>
where:
<Gem> type = <Gem> quality =
Ruby (Fire Min) Chipped (-1)
Topaz (Lightning Min) Flawed (-5)
Emerald (Poison Min) Standard (-20)
Sapphire (Cold Min) Flawless (-100)
Diamond (Physical Min) Perfect (-500)
```

Skull (Fire, Ltng, Cold, Poison, Phys Min)

In order to remove an entire damage bonus attribute, it may be necessary to remove the minimum and maximum damage range values.

For example, a dagger with a bonus fire damage of 5-20 will require a number of application of the above recipes. One set of recipes must be used to remove the minimum 5 Fire damage and the other set of recipes to remove the maximum 20 Fire damage. In this case, use a Flawed Ruby along with an Antidote potion to remove the minimum 5 Fire damage; this will cause the display to change to +20 Max Fire damage. This remaining attribute can be removed by using a Standard Ruby and a Thawing potion. The maximum 20 Fire damage bonus will be removed along with the attribute line.

RESISTANCE REDUCTION RECIPES (reduces resistance bonuses):

These recipes can be used to reduce and remove elemental resistance bonuses bestowed by items. Specifically, bonuses to Fire, Cold, Lightning, Poison and Physical damage resistance can be reduced and subsequently removed when reduced to zero. Be careful not to incur negative resistances as they will indeed cause additional damage to be suffered from the specified attack forms by monsters.

```
<any Item> + <Gem> + <Rejuvenation potion> -> same <Item> - <Resistance Bonus> where:
  <Gem> type = <Gem> quality =
  Ruby (Fire Resist) Chipped (-1)
  Topaz (Lightning Resist) Flawed (-5)
  Emerald (Poison Resist) Standard (-20)
  Sapphire (Cold Resist) Flawless (-100)
```

Diamond (Physical Resist)

Amethyst (Magic Resist)

Skull (Fire, Ltng, Cold, Poison Resist)

Please note that Amethyst will reduce damage resistance to Magic damage. Skulls only remove the basic four elemental damage forms - not Physical or Magic damage resistances since these are uncommon. Physical resistance is often referred to as Percent Damage Reduction by players.

STAT REDUCTION RECIPES (reduces character stat bonuses):

These recipes can be used to reduce and remove stat bonuses bestowed by items. Specifically, bonuses to the character's Strength, Dexterity, Vitality, Energy, Attack Rating, Defense, Stamina, Mana and Life can be reduced. Reduce the stat bonus to zero and the bonus attribute line will disappear. Be careful not to incur negative bonuses as they will indeed subtract from the characters' stats.

<any Item> + <Gem/Rune> + <Stamina potion> -> same <Item> - <Stat Bonus> where:

<Gem/Rune> type = <Gem> quality = <Rune> quantity =

Ruby (Strength) Chipped (-1) One (-1)

Topaz (Dexterity) Flawed (-5) Two (-5)

Emerald (Vitality) Standard (-20) Three (-20)

Tir Rune (Energy) Flawless (-100) Four (-100)

Diamond (Stamina) Perfect (-500) Five (-500)

El Rune (Attack)

Eld Rune (Defense)

Amethyst (Life)

Sapphire (Mana)

Skull (Strength, Dexterity, Vitality, Energy)

For example, take a sword with +165 Attack. Place the sword in the cube along with four El Runes and a Stamina potion. Press Transmute and the Attack bonus will be reduced to +65. Place three El Runes and a Stamina - the bonus is reduced to +45; do it again will reduce it to +25 and yet again, the bonus will be only +5. Lastly, put in two El Runes to remove this last +5 bonus and the entire Attack bonus line will then be removed.

Use Skull(s) to simultaneously remove from Strength, Dexterity, Vitality and Energy. A Chipped Skull with a Stamina potion will remove 1 from each of the four base stats. A Flawed Skull will remove 5 stat points from each base stat. A Standard Skull 20 stat points. Flawless Skull 100 stat points and a Perfect Skull, 500 stat points!

ABSORPTION REDUCTION RECIPES (reduces elemental absorption bonuses):

These recipes will reduce and remove elemental damage absorption bonuses. Specifically, these bonuses are absorb fire damage, absorb cold damage, absorb lightning damage and absorb magic damage. These attributes are very uncommon and are stated like: +12 Fire Absorb or +7 Cold Absorb.

<any Item> + <Gem> + <Healing potion> -> same <Item> - <Absorption Bonus>
where:

<Gem> type = <Gem> quality =

Ruby (Fire Absorb) Chipped (-1)

Topaz (Lightning Absorb) Flawed (-5)

Amethyst (Magic Absorb) Standard (-20)

Sapphire (Cold Absorb) Flawless (-100)

Skull (Fire, Ltng, Cold Absorb)

Please note that Skulls will only remove Fire, Cold and Lightning Absorbs simultaneously - but not Magic (which is not as common).

A variation of these recipes using a **Greater Healing Potion>** rather than a **Healing Potion>** will remove **elemental absorption bonuses based on character level**. Note that there is recipe to remove Magic Absorb/level - this attribute does not exist in the current patch 1.09 version of Diablo 2. These attributes are very, very uncommon and will appear on items like: +16 Fire Absorb (Based on Character Level).

<any Item> + <Gem> + <Greater Healing potion> -> same <Item> - <Absorption Level-Based Bonus>
where:

<Gem> type = <Gem> quality =

Ruby (Fire Absorb/level) Chipped (-1)
Topaz (Lightning Absorb/level) Flawed (-5)
Sapphire (Cold Absorb/level) Standard (-20)
Skull (Fire, Ltng, Cold Absorb/level) Flawless (-100)
A variation of these recipes using a <Super Healing Potion> rather than a <Healing Potion> wil

A variation of these recipes using a **Super Healing Potion>** rather than a **Healing Potion>** will remove **elemental** absorption percent bonuses. These attributes are extremely rare and will appear on items like: 16% Fire Damage Absorb. <any Item> + **Gem>** + **Super Healing potion>** -> same **Item>** - **Absorption Level-Based Bonus>**

where:

<Gem> type = <Gem> quality =

Ruby (Fire Absorb Percent) Chipped (-1)

Topaz (Lightning Absorb Percent) Flawed (-5)

Amethyst (Magic Absorb Percent) Standard (-20)

Sapphire (Cold Absorb Percent) Flawless (-100) Skull (Fire, Ltng, Cold Absorb Percent)

LEVEL-BASED REDUCTION RECIPES:

These recipes will reduce and eliminate the attribute bonuses which are calculated based on character level. The bonuses affected by these recipes are like: defense based on character level, attack based on character level, life based on character level, etc. These bonuses are applied in increments of one-eighth (1/8) - 1 point of bonus attribute per 8 character levels. Some items may have higher multiples of eighths.

For instance, a charm may grant 1 life per 2 character levels - this item has 4 multiples of one eighth. To remove this attribute, it must be reduced by a -4/level modifier. Some more powerful items may have even higher multiples. An item that grants 2 mana per character level actually has 16 multiples of one eighth and a -16/level modifier must be applied to remove it

<any Item> + <Gem/Rune> + <Full Rejuvenation potion> -> same <Item> - <Level-Based Bonus> where:

<Gem> type = <Rune> type = <Gem> quality = <Rune> quantity =
Ruby (Life/level) El (Str/level) Chipped (-1/level) One (-1/level)

Ruby (Life/level) Li (311/level) Chipped (-1/level) One (-1/level)

Topaz (Mana/level) Eld (Dex/level) Flawed (-3/level) Two (-3/level)

Emerald (Attack/level) Tir (Vit/level) Standard (-10/level) Three (-10/level)

Sapphire (Defense/level) Nef (Enr/level) Flawless (-50/level) Four (-50/level)

Diamond (Damage/level) Eth (Gold%/level)

Amethyst (Stamina/level) Ith (Magic%/level)

Skull (Attack%/level) Tal (Defense%/level)

Some players may question why anyone would want to remove these very beneficial attributes. For very high level characters, the bonuses per character level are more of a hindrance than a bonus. The most powerful characters in the **Zy-EI** mod have to be aware of damage and stat caps which exist within the game. These limits are normally never breached within "vanilla" LOD. The **Zy-EI** mod pushes the limits, however, and sometimes too far.

Players may also choose to remove lesser attributes on several items and consolidate the same attribute bonuses on a single item. Rather than having three items with +1 life/8 levels, it is better to have a single item with +3 life/8 levels. At the higher levels, some bonuses become irrelevant. There is no need for a higher attack value when your Guided Arrow always hits.

MAGIC COLLECTORS (something to do with magic junk):

Collectors accumulate magic from items and can be transformed into static items such as Gems, Runes, Elixirs, Demon Keys . . . even Celebrity Fragments. Any magic item (that is, Magic, Rare, Crafted, Set or Unique) transmuted in a Horadric Cube with a Magic Collector will cause the item to disappear. The resulting dispersed magic is absorbed by the Collector in the form of Cube Points. Collectors can also be used to collect magic from static items such as gems, jewels, runes, Demon Boxes, Demon Keys, Elixirs, Cube Scrolls, Zy-El Fragments, Zy-El Scrolls and even Celebrity Items.

The higher quality item that is input, the more Cube Points are collected. Refer to the **Charge** column of **Appendix C**.

***Note: unidentified magic items do NOT need to be identified prior to using the Collector to absorb their magic.

For example, let's say we start with a **Collector** that has 0 Cube Points. Place this **Collector** in the **Horadric Cube** with an **El** rune and press the Transmute button. The **El** rune disappears and all that is left is the **Collector** with 1 Cube Point stored. Do the same thing with a magic jewel and the **Collector** will gain an additional 5 Cube Points for a total of 6. Collector can absorb up to 10 similar items at most during a single transmutation. There is no cap on how many cube points collector can store.

Redeeming Collectors for Items: once sufficient Cube Points have been accumulated they can be redeemed for various items.

To do that you must first change the Collector mode. Place a Collector into Horadric Cube and click transmute. This will change the Collector to Extractor. Extractor can duplicate most items as long as you have enough cube points.

For example, let's say we start with an Extractor that has 80 Cube Points. Place this Extractor in the Horadric Cube with an El rune and press the Transmute button. This will result in 2 x El runes and Extractor with 75 Cube Point. Now take both runes out add a Magic Jewel and press transmute. You will get exactly the same Magic Jewel, another random Magic Jewel and an Extractor with 25 Cube points left.

Transmuting an Extractor in the Horadric Cube will change its mode to Upgrader. This is useful when you want to get an item but you cannot duplicate it. Upgrader allows you to upgrade gems, runes and cube scrolls or change item quality: magic -> rare -> crafted -> set -> unique.

For example, let's say we start with an **Upgrader** that has 80 Cube Points. Place this **Upgrader** in the **Horadric Cube** with a **Chipped Ruby** and press the Transmute button. This will result **in Flawed Ruby** and **Upgrader** with 60 Cube Point. Transmute again and you will get **Normal Ruby** and an **Upgrader** with 0 Cube Points.

Transmute Upgrader back into Collector mode to be able to collect more Cube points.

CELEBRITY ITEMS (optional quests):

These are quests for items bearing the likenesses of known personalities and memorabilia. These quests are optional and players may choose not to participate by simply ignoring the quest items. There are several types of Celebrity Items that players may undertake and the methods of completing the Items differ slightly but all have the same principle. Collect the broken Fragments and assemble them in the Horadric Cube to form the quest item. The Fragments may be found on any map, dropped by any monster on any game difficulty. However, some specific Fragments will tend to drop more often from certain monsters in certain areas. Just doing the same maps over and over again does not guarantee that you will find all the Fragments to complete a quest - you will have to roam the maps. Maybe even go to those places that most players tend to ignore.

Celebrity Items are a class unto themselves and as such do not obey the crafting rules commonly used in other parts of this mod. Celebrity Items resemble charms in that they have to be placed in your backpack in order to activate their powerful attributes. Celebrity Items do not have sockets nor can sockets be crafted to them or added in any way. Demon Keys have no effect on them either. Any attempt to do unrecognized crafting with a Celebrity item or any Celebrity Fragments will have unpleasant results. The only recipes that will work on Celebrity Items are the ones documented in this section which are specific to Celebrity Items.

Minor Celebrity Posters are the easiest of the Celebrity Items to assemble but are also less powerful. The Minor Celeb items each consist of three Fragments (found in Normal difficulty only). However, finding the specific three Fragments will be challenging. There are many different Minor Celeb items. Once the three Fragments have been located, the Minor Celeb Poster can be assembled by transmuting them in the Horadric Cube.

Did I say these were Minor Celebrity quests or Celebrity quests for minors? You figure it out. Oh, bother!

Album Posters are similar to Minor Posters in that a fixed number of fragments are required to assemble the Item. Where the Minor Poster requires 3 fragments, the Album Poster requires 5. As a consequence, the Album Posters are more powerful than the Minor Posters but not as power as the Major Posters. Album Poster fragments will not commonly drop from monsters. All transformation recipes that apply to Minor Poster fragments will also work with Album Poster fragments. Similarly, any recipes that apply to Minor Posters will also apply to Album Posters. Minor Poster Fragments

Major Celebrity Posters are far more powerful than the Minor/Album Posters and are more difficult to locate and assemble. The Major Fragments are found only on Nightmare and Hell difficulties. For the Major Celebrity items, the Fragments do not assemble to form the items themselves – rather the Fragments are combined to create Top and Bottom Wear items. There are male and female Major Celebrities. The males have male Wear items – T-shirts and boxers while the females have . . . well, you can ascertain what for yourself. One player did make the comment, "this mod has everything but Carmen Electra's underwear" – well, that's not the case anymore.

These Wear Fragments also come in various colors. Only the same Wear Fragments of the same color will transmute into a completed Wear Item. Combining a male Top Wear item with a male Bottom Wear item will transmute to a **Major Celebrity** Poster.

CELEBRITY TRANSFORMATION RECIPES (additional support recipes):

These recipes will allow players some flexibility in manipulating/re-rolling Celebrity items. The only recipes that will work on Celebrity Items are the ones documented in this section which are specific to Celebrity Quest items.

Can't get enough of your favorite Major Celebrity from the Poster-sized picture? Well, here's an option to expand the 4x6 Poster to a 6x9 Wallpaper. Take a screen capture and prove it to your friends. While the Celebrity Items are in Wallpaper form, no attributes or bonuses are active. Please note that expanding Posters to Wallpapers will reset the Poster attributes to the default Poster attributes – any modifications to the Poster's stats will be lost.

- <Major Celebrity Poster> + <Stamina Potion> ---> <Major Celebrity Wallpaper>
- <Major Celebrity Wallpaper> + <Key> ---> <Major Celebrity Poster>

Keep finding the same Fragments over and over again? Too many mis-matched pieces? Well, here are some recipes that offer an alternative to searching under every rock:

- <Minor Celebrity Fragment> x 3 ---> random <Minor Celebrity Fragment> or <Album Fragment>
- <Major Celebrity Fragment Male> x 3 ---> random <Major Celebrity Fragment Male>
- <Major Celebrity Fragment Female> x 3 ---> random <Major Celebrity Fragment Female>

Collect them all - if you can!!! How many Celebrity Posters are there? Approximately 480+ Minor and Major Celebrity Posters in total. And there have been requests for more. We'll see.

TREASURE CARDS (Do you feel lucky, punk?): A new treasure item, a new collectable item and a new crafting method all in one new item type - the Zy-El Treasure Deck consists of seven suits of 15 cards as opposed to 4 suits and 13 cards in a regular deck of playing cards. The seven suits include: Spades, Clubs, Hearts, Diamonds, Talons, Swords and Stars. The cards are numbered as 2 to 10, Jack, Queen, King, Ace, El and Zy. There are also 10 Jokers that figure into the building of hands. Treasure Cards can drop from any monster and any treasure store throughout the game. The higher numbered cards and higher suits are more commonly found in the more difficult and isolated map areas. Playing at a higher difficulty (ie Nightmare or Hell) as well as a higher Players X setting will increase the chances of higher valued Treasure Cards dropping. These items will appear as Thumbnails when dropped but can be made full-size. To convert the Thumbnail to a full-sized **Treasure Card**, use the following cube recipe: <TC Thumbnail> + <chipped gem> --> <Treasure Card> To convert the **Treasure Card** back to a Thumbnail, use this cube recipe: <Treasure Card> + <chipped gem> --> <TC Thumbnail> Transformation Recipes (upgrade, downgrade and re-roll Cards): Among the Zy-El Treasure Cards, there are Numbered Cards (numbered from 2 to 10), Face Cards (Jack, Queen, King, Ace, El and Zy) and Jokers (numbered from 0 to 9). All of these transformation recipes will work with TC thumbnails. The quickest way to create a **Joker** card is to downgrade a **Numbered** or **Face Card**, like so: <Numbered Card> + <Key> ---> random <Joker> OR <Face Card> + <Key> ---> random <Joker> To downgrade a Treasure Card to a lower valued Treasure Card, use these recipes: <Numbered Card> + <Flawed Gem> ---> random suit <Numbered Card - 1> <Face Card> + <Flawed Gem> ---> random suit <Face Card - 1> <Numbered Card> + <Standard Gem> ---> same suit <Numbered Card - 1> <Face Card> + <Standard Gem> ---> same suit <Face Card - 1> To generate a Treasure Card of a random suit using cards of the same **Number** or **Face**, use this recipe: <Numbered Card same Number, any suit> x 3 ---> random suit <Numbered Card same Number>

For example:
To generate **Treasure Cards** of higher values, use these recipes:

- <Joker> x 5 ---> random suit <Number 2 Card>
- <Numbered Card same Number> x 5 ---> random suit <Numbered Card Number + 1>
- <Face Card same Face> x 5 ---> random suit <Face Card Face + 1>
- <Numbered Card same Number, same Suit > x 5 ---> same suit <Numbered Card Number + 1>
- <Face Card same Face, same Suit> x 5 ---> same suit <Face Card Face + 1>

<Face Card same Face, any suit> x 3 ---> random suit <Face Card same Face>

All of these transformation recipes will work with Treasure Card thumbnails.

TREASURE CARD CASHOUT RECIPES (What is it worth?):

Certain combinations of **Treasure Cards** submitted in the Horadric Cube will yield an item chosen from among available item types. The Cashout recipes will resemble poker hands, but are not. After all, there are seven suits and 15 different cards in each suit for a total of 105 cards and also include 10 Joker cards. **So, disregard the value precedences of poker and read these rules!**

In order to cash-out, a complete Zy-El hand must be submitted. A complete hand consists of 7 cards, no more and no less. There are several types of hands that can be completed and these are the only types that will be recognized by the Horadric Cube as described below. In the Zy-El mod, it is possible for the same Treasure Cards to drop more than once - these items are NOT unique. These items are not charms or wear-able items. They do not bestow any benefits in and of themselves. Treasure Cards can be sold to merchants for gold or fed to Collectors for magic points.

Default Of-A-Kind (a Zy-El hand with same valued cards, not necessarily the same suit):

Treasure Cards with the same value can be combined in any number up to 7 cards to form a hand. For instance, a hand containing a 2 of Hearts and another 2 of Hearts is called a 2-of-a-kind with 2's. Similarly, a hand consisting of 3×8 of Clubs would be called a 3-of-a-kind with 8's. Or, a hand with 4×7 of Talons would be called a 4-of-a-kind with 7's. As stated above, a complete **Zy-EI** hand requires 7 cards. For combinations of Of-A-Kind hands, the remaining slots are filled with **Jokers** to make up a complete hand of 7 cards. So, a 2-of-Kind hand would consist of two cards of the same value along with 5 Jokers. The Jokers have no other value other than being filler cards to complete a **Zy-EI** hand.

The cash-out values are not known at this time and are subject to change upon Kato's whim. Every combination will yield a different result. Hands consisting of higher numbers and face cards will give greater rewards as will cards of certain suits. Harder to build card combinations will tend to yield better cash-outs.

Identical Of-A-Kind (a Zy-El hand with multiples of the exact same card - same number and same suit):

Since it is possible to have multiples of the same **Treasure Card**, most Of-A-Kind hands will contain the same valued cards more often than not. Of-A-Kind hands with exactly the same number and same suit are referred to as **Identical Of-A-Kind** hands.

Unique Of-A-Kind (a Zy-El hand with same valued cards but different suits):

An Of-A-Kind hand consisting of all different suits would be referred to as Unique. All the non-Joker cards in the hand must be of different suits and of the same value in order to be considered a Unique-Of-A-Kind hand. If any cards are of the same suit, it is considered to be a default Of-A-Kind hand, not Unique. The Horadric Cube will always check for a Unique-Of-A-Kind hand before searching for default Of-A-Kind hand.

Default Two-Pairs (a Zy-El hand with two pairs of cards with the same values):

A Two-Pair hand will consist of one pair of cards with the same value (ie same number or same face card) as well as a second pair of cards with values different from the first pair but the same as each other. The remainder of the cards in the hand must be filled with Jokers.

Identical Two-Pairs (a Zy-El hand with two pairs of exactly the same cards):

An Identical **Two-Pair** hand will consist of two pairs of identical cards. However, both pairs will be of different values or different suits from each other.

Matching Two-Pairs (a Zy-El hand with two pairs of exactly the same cards and all cards of same suit):

A Matching Two-Pair hand will consist of two pairs of cards with each pair consisting of exactly the same card and all non-Joker cards will be of the same suit.

Unique Two-Pairs (a Zy-El hand with two pairs of cards with the same values, but all different suits):

A Unique Two-Pair hand will consist of two pairs of cards with the same values; however all non-Joker cards will consist of different suits.

Default Three-Pairs (a Zy-El hand with three pairs of cards with the same values):

A Three-Pair hand will consist of three pairs of cards with the same value (ie same number or same face card). The values of each pair will differ from each other, however. The last remaining card in the hand in the 7-card Zy-El hand must consist of a **Joker**. In a default **Three-Pair** hand, suits do not matter.

Identical Three-Pairs (a Zy-El hand with three pairs of exactly the same cards):

A Three-Pair hand will consist of three pairs of cards with each pair consisting of exactly the same card.

Matching Three-Pairs (a Zy-El hand with three pairs of exactly the same cards and all cards of same suit):

A Matching Two-Pair hand will consist of three pairs of cards with each pair consisting of exactly the same card and all non-Joker cards will be of the same suit.

Unique Three-Pairs (a Zy-El hand with three pairs of cards with the same values, but all different suits):

A Unique Three-Pair hand will consist of three pairs of cards with the same values but all six non-Joker cards will be of different suits.

Default Full-House (a hand consisting of a 3-Of-A-Kind and a 4-Of-A-Kind, with different values):

A **Default Full-House** hand consists of a 3-Of-A-Kind and a 4-Of-A-Kind combined in a single Zy-El hand; both of these Of-A-Kinds will have different values. The suits do not matter. Here are some examples of **Default Full House** hands:

Identical Full-House (a hand consisting of a 3-Of-A-Kind and a 4-Of-A-Kind, with exactly the same cards):

An **Identical Full-House** consists of a 3-Of-A-Kind and a 4-Of-A-Kind combined in a single Zy-El hand; both of these Of-A-Kinds will have exactly the same cards.

Matching Full-House (a hand consisting of a 3-Of-A-Kind and a 4-Of-A-Kind, with exactly the same cards, all cards of the same suit):

A Matching Full-House consists of a 3-Of-A-Kind and a 4-Of-A-Kind combined in a single Zy-El hand; both of these Of-A-Kinds will have exactly the same cards.

Default Stacked-House (a hand consisting of a 2-Of-A-Kind and a 5-Of-A-Kind, with different values):

A **Default Stacked-House** hand consists of a 2-Of-A-Kind and a 5-Of-A-Kind combined in a single Zy-El hand; both of these Of-A-Kinds will have different values. The suits do not matter.

Identical Stacked-House (a hand consisting of a 2-Of-A-Kind and a 5-Of-A-Kind, with exactly the same cards):

An **Identical Stacked-House** consists of a 2-Of-A-Kind and a 5-Of-A-Kind combined in a single Zy-El hand; both of these Of-A-Kinds will have exactly the same cards.

Matching Stacked-House (a hand consisting of a 2-Of-A-Kind and a 5-Of-A-Kind, with exactly the same cards, all cards of the same suit):

A Matching Stacked-House consists of a 2-Of-A-Kind and a 5-Of-A-Kind combined in a single Zy-El hand; both of these Of-A-Kinds will have exactly the same cards.

Default Crowded-House (a hand consisting of a 2-Of-A-Kind and another 2-Of-A-Kind and a 3-Of-A-Kind, with different values): A Default Crowded-House hand consists of a 2-Of-A-Kind and another 2-Of-A-Kind and a 3-Of-A-Kind combined in a single Zy-El hand; both of these Of-A-Kinds will have different values. The suits do not matter.

Identical Crowded-House (a hand consisting of a 2-Of-A-Kind and another 2-Of-A-Kind and a 3-Of-A-Kind, with exactly the same cards):

An **Identical Crowded-House** consists of a 2-Of-A-Kind and another 2-Of-A-Kind and a 3-Of-A-Kind combined in a single Zy-El hand; both of these Of-A-Kinds will have exactly the same cards.

Matching Crowded-House (a hand consisting of a 2-Of-A-Kind and another 2-Of-A-Kind and a 3-Of-A-Kind, with exactly the same cards, all cards of the same suit): A Matching Crowded-House consists of a 2-Of-A-Kind and another 2-Of-A-Kind and a 3-Of-A-Kind combined in a single Zy-El hand; both of these Of-A-Kinds will have exactly the same cards.

Default Straight (a hand consisting of a 7 cards in numerical sequence): A Default Straight hand consist of 7 cards in numerical sequence ranging from 2 to 10 to Jack, Queen, King, Ace, El and Zy. The suits do not matter.

Straight Flush (a hand consisting of a 7 cards in numerical sequence and all of the same suit): A Straight Flush hand consist of 7 cards in numerical sequence ranging from 2 to 10 to Jack, Queen, King, Ace, El and Zy. The suits of all cards must be the same.

Unique Straight (a hand consisting of a 7 cards in numerical sequence and one of each suit): A Unique Straight hand consist of 7 cards in numerical sequence ranging from 2 to 10 to Jack, Queen, King, Ace, El and Zy. The suits of all cards must be different.

Default Flush (a hand consisting of a 7 cards all of the same suit): A Default Flush hand consists of 7 cards all of the same suit. The card values do not matter.

Eagle Flush (a hand consisting of an Identical 4-Of-A-Kind and one other non-Joker card all of the same suit):

A **Eagle Flush** hand consists of an Identical 4-Of-A-Kind as well as a single non-Joker card - all of these cards are of the same suit. The single non-Joker card is referred to as the Head card with the Identical 4-Of-A-Kind acting as the two "wing" pairs to form the **Eagle Flush**. The Head card must be of a higher value than the "wing" cards. The suits of all non-Joker cards must be of the same suit. There must be two Joker cards in order to complete the 7-card requirement for Zy-El hands.

Phoenix Flush (a hand consisting of an Identical 6-Of-A-Kind and one other non-Joker card all of the same suit): A Phoenix Flush hand consists of an Identical 6-Of-A-Kind as well as a single non-Joker card - all of these cards are of the same suit. The single non-Joker card is referred to as the Head card with the Identical 6-Of-A-Kind acting as the two "wing" triplets to form the Phoenix Flush. The Head card must be of a higher value than the "wing cards. The suits of all non-Joker cards must be of the same suit.

MOD INSTALLATION INSTRUCTIONS:

Standalone install:

This mod required version 1.10f to play. Backup original D2Client.dll, D2Common.dll, D2Game.dll.

Copy all the files to your [D2 install folder]/zyel. Copy D2Client.dll, D2Common.dll, D2Game.dll, D2Mod.dll, and D2ModSetup.exe from zyel folder to your D2 install folder. Run D2ModSetup.exe to install D2Mod. You can read more about it at D2Mods.info. Make a copy of your D2 shortcut on desktop. Right click and choose Properties from the context menu. If you installed D2 to 'D:\Diablo II\' the 'Target' field would be "D:\Diablo II\Diablo II.exe" and the 'Start in' would be "D:\Diablo II\".

You would need to add -mod zyel -direct -txt at the end of Target field. The whole target field would be "D:\Diablo II\Diablo II.exe" -mod zyel -direct -txt

You would also need to change 'Start in' field to the zyel folder you have copied earlier: "D:\Diablo II\zyel" There is a picture of how the shortcut should look like if D2 was installed at D:\Diablo II\

D2SE install:

This one is easy: copy all the files to your [D2 install folder]/MODS/zyel.

*** THERE IS NO WAY THAT CHARACTERS FROM ORIGINAL LOD AND OTHER MODS WILL WORK IN THIS MOD. CHARACTERS FROM PREVIOUS VERSIONS OF ZY-EL WILL NOT LOAD IN THIS NEW MOD VERSION. KATO IS NOT RESPONSIBLE FOR ANY DAMAGE DONE TO YOUR EXISTING CHARACTERS SHOULD YOU ATTEMPT TO LOAD THEM. YOU'VE BEEN WARNED!

SPECIAL THANKS (Check out the Diablo2 CREDITS screen):

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Appendix A: Gem Socket Attributes:

level	weapon	length	Min	Max	armor	Min	Max	shield	Min	Max
4	att%		15	15	str	5	5	ac%	20	20
8	att%		30	30	str	10	10	ac%	40	40
16	att%		45	45	str	15	15	ac%	60	60
32	att%		60	60	str	20	20	ac%	80	80
64	att%		75	75	str	25	25	ac%	100	100
4	dmg-cold	1 sec	4	6	mana	20	20	res-cold	10	10
8	dmg-cold	2 sec	8	12	mana	40	40	res-cold	20	20
16	dmg-cold	3 sec	12	18	mana	60	60	res-cold	30	30
32	dmg-cold	4 sec	16	24	mana	80	80	res-cold	40	40
64	dmg-cold	5 sec	20	30	mana	100	100	res-cold	50	50
4	dmg-pois	2 sec	52	52	dex	5	5	res-pois	10	10
8	dmg-pois	2 sec	103	103	dex	10	10	res-pois	20	20
16	dmg-pois	2 sec	154	154	dex	15	15	res-pois	30	30
32	dmg-pois	2 sec	205	205	dex	20	20	res-pois	40	40
64	dmg-pois	2 sec	256	256	dex	25	25	res-pois	50	50
4	dmg-fire		4	8	hp	25	25	res-fire	10	10
8	dmg-fire		8	16	hp	50	50	res-fire	20	20
16	dmg-fire		12	24	hp	75	75	res-fire	30	30
32	dmg-fire		16	32	hp	100	100	res-fire	40	40
64	dmg-fire		20	40	hp	125	125	res-fire	50	50
4	dmg-mag		4	5	dmg%	2	2	res-all	4	4
8	dmg-mag		8	10	dmg%	4	4	res-all	8	8
16	dmg-mag		12	15	dmg%	8	8	res-all	12	12
32	dmg-mag		16	20	dmg%	10	10	res-all	16	16
64	dmg-mag		20	25	dmg%	12	12	res-all	20	20
4	dmg-ltng		1	12	mag%	5	5	res-Itng	10	10
8	dmg-Itng		2	24	mag%	10	10	res-Itng	20	20
16	dmg-ltng		3	36	mag%	15	15	res-Itng	30	30
32	dmg-ltng		4	48	mag%	20	20	res-ltng	40	40
64	dmg-ltng		5	60	mag%	25	25	res-Itng	50	50
6	lifesteal		1	1	regen-hp	3	3	thorns	20	20
	manasteal		1	1	regen-mana	5	5			
12			2		regen-hp			thorns	40	40
24								thorne	60	60
4 7	•							11101113	00	00
48	lifesteal		4	4	regen-hp	12	12	thorns	80	80
	manasteal		4	4	regen-mana	20	20			
96	lifesteal		5	5 5	regen-hp	15 25	15 25	thorns	100	100
	4 8 16 32 64 4 8 16 32 64 4 8 16 32 64 4 8 16 32 64 4 8 16 32 64 4 8 16 32 64 4 8 16 32 64 4 8 16 4 8 16 8 16 8 8 16 8 8 8 8 8 8 8 8 8 8 8	4 att% 8 att% 16 att% 32 att% 64 att% 4 dmg-cold 8 dmg-cold 16 dmg-cold 32 dmg-cold 4 dmg-pois 8 dmg-pois 16 dmg-pois 32 dmg-pois 4 dmg-fire 8 dmg-fire 16 dmg-fire 16 dmg-fire 4 dmg-fire 4 dmg-fire 4 dmg-mag 8 dmg-mag 16 dmg-mag 16 dmg-mag 16 dmg-mag 16 dmg-ltng 17 dmg-ltng 18 dmg-ltng 19 dmg-ltng 10 dmg-ltng 11 dmg-ltng 12 lifesteal 12 lifesteal 14 lifesteal 15 lifesteal 16 lifesteal 16 lifesteal 17 lifesteal 18 lifesteal 19 lifesteal 10 manasteal 10 lifesteal 11 lifesteal 12 lifesteal 14 lifesteal 15 lifesteal 16 lifesteal	4 att% 8 att% 16 att% 32 att% 64 att% 4 dmg-cold 1 sec 8 dmg-cold 2 sec 16 dmg-cold 3 sec 32 dmg-cold 4 sec 64 dmg-pois 2 sec 8 dmg-pois 2 sec 16 dmg-pois 2 sec 17 dmg-pois 2 sec 18 dmg-fire 19 dmg-fire 10 dmg-fire 11 dmg-fire 12 dmg-fire 13 dmg-fire 14 dmg-mag 15 dmg-mag 16 dmg-mag 16 dmg-mag 17 dmg-ltng 18 dmg-ltng 19 dmg-ltng 10 dmg-ltng 11 dmg-ltng 12 lifesteal manasteal 13 lifesteal manasteal 14 lifesteal manasteal 15 lifesteal manasteal 16 lifesteal manasteal	4 att% 15 8 att% 30 16 att% 45 32 att% 60 64 att% 75 4 dmg-cold 1 sec 4 8 dmg-cold 2 sec 8 16 dmg-cold 3 sec 12 32 dmg-cold 4 sec 16 64 dmg-pois 2 sec 52 8 dmg-pois 2 sec 103 16 dmg-pois 2 sec 154 32 dmg-pois 2 sec 205 64 dmg-fire 4 8 dmg-fire 8 16 dmg-fire 12 32 dmg-fire 16 64 dmg-fire 20 4 dmg-mag 4 8 dmg-mag 4 8 dmg-mag 12 32 dmg-mag 16 64 dmg-mag 12 32 dmg-ltng 1 8 dmg-ltng 2 16 dmg-ltng 5 6 lifesteal 1 12 lifesteal 1 11 lifesteal 2 12 manasteal 1 12 lifesteal 3 14 manasteal 3 14 lifesteal 3 15 16 dmg-steal 4 16 manasteal 4 16 lifesteal 3 17 manasteal 4 18 lifesteal 3 18 lifesteal 3 19 manasteal 4 19 manasteal 4 10 dmg-steal 4 10 dmg-steal 3 11 lifesteal 3 12 lifesteal 3 13 dmg-steal 4 14 dmg-steal 4 14 dmg-steal 3 15 dmg-steal 4 16 dmg-steal 3 17 dmg-steal 4 18 lifesteal 3 18 lifesteal 4 19 dmg-steal 4 19 dmg-steal 4 19 dmg-steal 4 10 dmg-steal 4 10 dmg-steal 4 11 dmg-steal 4 11 dmg-steal 4 12 lifesteal 3 13 dmg-steal 4 14 dmg-steal 4 14 dmg-steal 4 15 dmg-steal 4 16 dmg-steal 4 17 dmg-steal 4 18 lifesteal 4 18 lifesteal 4 19 dmg-steal 4 19 dmg-steal 4 10 dmg-steal 4 10 dmg-steal 4 11 dmg-steal 4 11 dmg-steal 4 12 lifesteal 4 12 lifesteal 4 13 dmg-steal 4 14 dmg-steal 4 15 dmg-steal 4 16 dmg-steal 4 17 dmg-steal 4 18 lifesteal 4 18 lifesteal 4 18 lifesteal 4 18 lifesteal 4	4 att% 30 30 30 30 16 att% 45 45 45 32 att% 60 60 60 60 64 att% 75 75 75 4 dmg-cold 1 sec 8 12 16 dmg-cold 3 sec 12 18 32 dmg-cold 5 sec 20 30 4 dmg-pois 2 sec 103 103 16 dmg-pois 2 sec 154 154 32 dmg-pois 2 sec 256 256 4 dmg-fire 8 dmg-fire 8 dmg-fire 16 dmg-fire 12 24 32 dmg-fire 16 32 dmg-mag 8 10 16 dmg-mag 12 15 32 dmg-mag 16 20 40 4 dmg-mag 12 15 32 dmg-mag 16 20 40 4 dmg-mag 12 15 32 dmg-mag 16 20 40 4 dmg-mag 12 15 32 dmg-ltng 1 12 8 dmg-ltng 1 12 8 dmg-ltng 1 12 8 dmg-ltng 1 12 8 dmg-ltng 1 12 15 15 11 1 1 1 1 1 1 1 1 1 1 1 1 1	4 att% 15 15 str 8 att% 30 30 str 16 att% 45 45 str 32 att% 60 60 str 64 att% 75 75 str 4 dmg-cold 1 sec 4 6 mana 8 dmg-cold 2 sec 8 12 mana 16 dmg-cold 3 sec 12 18 mana 32 dmg-cold 4 sec 16 24 mana 64 dmg-cold 5 sec 20 30 mana 4 dmg-pois 2 sec 25 <td>4 att% 15 15 str 5 8 att% 30 30 str 10 16 att% 45 45 str 15 32 att% 60 60 str 20 64 att% 75 75 str 25 4 dmg-cold 1 sec 4 6 mana 20 8 dmg-cold 2 sec 8 12 mana 40 16 dmg-cold 4 sec 16 24 mana 80 64 dmg-cold 5 sec 20 30 mana 100 4 dmg-pois 2 sec 25c 52 dex</td> <td>4 att% 15 15 str 5 5 8 att% 30 30 str 10 10 16 att% 45 45 str 15 15 32 att% 60 60 str 20 20 64 att% 75 75 str 25 25 4 dmg-cold 1 sec 4 6 mana 20 20 8 dmg-cold 2 sec 8 12 mana 40 40 16 dmg-cold 4 sec 16 24 mana 80 80 64 dmg-cold 5 sec 20 30 mana 100 100 4 dmg-cold 5 sec 20 30 mana 100 100 4 dmg-cold 5 sec 20 30 mana 100 100 4 dmg-cold 4 sec 16</td> <td>4 att% 15 15 str 5 5 ac% 8 att% 30 30 str 10 10 ac% 16 att% 45 45 str 15 15 ac% 32 att% 60 60 str 20 20 ac% 4 dmg-cold 1 sec 4 6 mana 20 20 res-cold 4 dmg-cold 1 sec 8 12 mana 40 40 res-cold 16 dmg-cold 3 sec 16 24 mana 80 80 res-cold 4 dmg-cold 5 sec 16 24 mana 80 80 res-cold 4 dmg-cold 5 sec 20 30 mana 100 100 res-cold 4 dmg-cold 5 sec 20 30 mana 100 100 res-cold 4<!--</td--><td>4 att% 15 15 str 5 5 ac% 20 8 att% 30 30 str 10 10 ac% 40 16 att% 45 45 str 15 15 ac% 60 32 att% 60 60 str 20 20 ac% 80 64 att% 75 75 str 25 25 ac% 100 8 dmg-cold 1 sec 4 6 mana 20 res-cold 10 8 dmg-cold 3 sec 12 18 mana 60 60 res-cold 20 16 dmg-cold 5 sec 16 24 mana 80 80 res-cold 20 4 dmg-cold 5 sec 16 24 mana 80 80 res-cold 40 4 dmg-cold 4 sec 16 24<!--</td--></td></td>	4 att% 15 15 str 5 8 att% 30 30 str 10 16 att% 45 45 str 15 32 att% 60 60 str 20 64 att% 75 75 str 25 4 dmg-cold 1 sec 4 6 mana 20 8 dmg-cold 2 sec 8 12 mana 40 16 dmg-cold 4 sec 16 24 mana 80 64 dmg-cold 5 sec 20 30 mana 100 4 dmg-pois 2 sec 25c 52 dex	4 att% 15 15 str 5 5 8 att% 30 30 str 10 10 16 att% 45 45 str 15 15 32 att% 60 60 str 20 20 64 att% 75 75 str 25 25 4 dmg-cold 1 sec 4 6 mana 20 20 8 dmg-cold 2 sec 8 12 mana 40 40 16 dmg-cold 4 sec 16 24 mana 80 80 64 dmg-cold 5 sec 20 30 mana 100 100 4 dmg-cold 5 sec 20 30 mana 100 100 4 dmg-cold 5 sec 20 30 mana 100 100 4 dmg-cold 4 sec 16	4 att% 15 15 str 5 5 ac% 8 att% 30 30 str 10 10 ac% 16 att% 45 45 str 15 15 ac% 32 att% 60 60 str 20 20 ac% 4 dmg-cold 1 sec 4 6 mana 20 20 res-cold 4 dmg-cold 1 sec 8 12 mana 40 40 res-cold 16 dmg-cold 3 sec 16 24 mana 80 80 res-cold 4 dmg-cold 5 sec 16 24 mana 80 80 res-cold 4 dmg-cold 5 sec 20 30 mana 100 100 res-cold 4 dmg-cold 5 sec 20 30 mana 100 100 res-cold 4 </td <td>4 att% 15 15 str 5 5 ac% 20 8 att% 30 30 str 10 10 ac% 40 16 att% 45 45 str 15 15 ac% 60 32 att% 60 60 str 20 20 ac% 80 64 att% 75 75 str 25 25 ac% 100 8 dmg-cold 1 sec 4 6 mana 20 res-cold 10 8 dmg-cold 3 sec 12 18 mana 60 60 res-cold 20 16 dmg-cold 5 sec 16 24 mana 80 80 res-cold 20 4 dmg-cold 5 sec 16 24 mana 80 80 res-cold 40 4 dmg-cold 4 sec 16 24<!--</td--></td>	4 att% 15 15 str 5 5 ac% 20 8 att% 30 30 str 10 10 ac% 40 16 att% 45 45 str 15 15 ac% 60 32 att% 60 60 str 20 20 ac% 80 64 att% 75 75 str 25 25 ac% 100 8 dmg-cold 1 sec 4 6 mana 20 res-cold 10 8 dmg-cold 3 sec 12 18 mana 60 60 res-cold 20 16 dmg-cold 5 sec 16 24 mana 80 80 res-cold 20 4 dmg-cold 5 sec 16 24 mana 80 80 res-cold 40 4 dmg-cold 4 sec 16 24 </td

Appendix B: Rune Socket Attributes:

name	level	weapon	length	Min	Max	armor	Min	Max	shield	Min	Max
El	2	ease		-10	-10	ease	-10	-10	ease	-10	-10
Eld	4	slow		25	25	stamdrain	15	15	block	7	7
Tir	6	mana-kill		2	2	mana-kill	2	2	mana-kill	2	2
Nef	8	heal-kill		10	10	heal-kill	10	10	heal-kill	10	10
Eth	10	reduce-ac		-25	-25	ας	25	25	ac	25	25
Ith	15	dmg-max		20	20	res-mag	30	30	res-mag	30	30
Tal	20	dmg-pois	1 sec	307	307	res-pois	30	30	res-pois	30	30
Ral	25	dmg-fire		5	30	res-fire	30	30	res-fire	30	30
Ort	30	dmg-Itng		1	50	res-Itng	30	30	res-Itng	30	30
Thul	35	dmg-cold	2 sec	10	20	res-cold	30	30	res-cold	30	30
Amn	40	lifesteal		5	5	regen	7	7	regen	7	7
Sol	45	dmg-min		15	15	red-dmg	7	7	red-dmg	7	7
Shael	50	swing cast		20 20	20 20	balance2	20	20	block2	20	20
Dol	60	openwounds		25	25	thorns light-thorns	15 15	15 15	thorns light-thorns	15 15	15 15
Hel	70	att%		20	20	ac%	20	20	ac%	20	20
Io	80	vit		20	20	vit	20	20	vit	20	20
Lum	90	enr		20	20	enr	20	20	enr	20	20
Ko	100	dex		20	20	dex	20	20	dex	20	20
Fal	110	str		20	20	str	20	20	str	20	20
Lem	120	mag%		15	15	mag%	15	15	mag%	15	15
Pul	130	deadly		20	20	regen-mana	15	15	regen-mana	15	15
Um	140	crush		20	20	res-all	15	15	res-all	15	15
Mal	150	dmg-mag		20	30	red-mag	15	15	red-mag	15	15
Ist	160	extra-mag		2	2	res-mag-max	3	3	res-mag-max	3	3
Gul	170	extra-pois		2	2	res-pois-max	3	3	res-pois-max	3	3
Vex	180	extra-fire		2	2	res-fire-max	3	3	res-fire-max	3	3
Ohm	190	extra-1tng		2	2	res-cold-max	3	3	res-cold-max	3	3
Lo	200	extra-cold		2	2	res-ltng-max	3	3	res-ltng-max	3	3
Sur	210	manasteal		5	5	mana%	3	3	mana	100	100
Ber	220	dmg%		20	20	red-dmg%	5	5	red-dmg%	5	5
Jah	230	noheal rip		1 1	1 1	hp%	3	3	hp	100	100
Cham	240	freeze		2	2	nofreeze	1	1	nofreeze	1	1
Zy	255	indestruct light		1 1	1 1	indestruct light	1	1	indestruct light	1	1

Appendix C: Collector Costs

Item	Collect	Extract	Upgrade	Item	Collect	Extract	Upgrade
Chipped Gem	3	10	xxx	Chipped Skull	10	30	xxx
Flawed Gem	9	30	20	Flawed Skull	30	90	60
Gem	27	90	60	Skull	90	270	180
Flawless Gem	81	270	180	Flawless Skull	270	810	540
Perfect Gem	243	810	540	Perfect Skull	810	2430	1620
r01 (EI)	1	5	xxx	r18 (Ko)	90	450	150
r02 (Eld)	2	10	5	r19 (Fal)	120	600	200
r03 (Tir)	3	15	7	r20 (Lem)	160	800	250
r04 (Nef)	4	20	9	r21 (Pul)	200	1000	300
r05 (Eth)	5	25	11	r22 (Um)	250	1250	350
r06 (Ith)	6	30	13	r23 (Mal)	300	1500	400
r07 (Tal)	7	35	15	r24 (Ist)	350	1750	450
r08 (Ral)	8	40	17	r25 (Gul)	400	2000	500
r09 (Ort)	10	50	20	r26 (Vex)	450	2250	550
r10 (Thul)	12	60	25	r27 (Ohm)	500	2500	600
r11 (Amn)	15	75	30	r28 (Lo)	600	3000	700
r12 (Sol)	20	100	40	r29 (Sur)	700	3500	800
r13 (Shael)	25	125	50	r30 (Ber)	800	4000	900
r14 (Dol)	30	150	60	r31 (Jah)	900	4500	1000
r15 (Hel)	40	200	80	r32 (Cham)	1,100	5500	1500
r16 (Io)	55	275	100	r33 (Zy)	1,500	7500	3000
r17 (Lum)	70	350	125				
Common Cube Scroll	15	300	xxx	Secret Cube Scroll	250	10,000	8200
Rare Cube Scroll	60	1,800	1500	Arcane Cube Scroll	1000	50,000	40000
Magic Charm	10	400	350	Magic Jewel	5	50	xxx
Rare Charm	30	3,000	2600	Rare Jewel	15	300	250
Crafted Charm	90	12,000	9000	Crafted Jewel	30	2,000	1700
Unique Charm	150	60,000	48000	Unique Jewel	50	10,000	8000
Magic Ring	5	100		Magic Amulet	5	100	
Rare Ring	10	600	500	Rare Amulet	10	600	500
Crafted Ring	15	3,600	3000	Crafted Amulet	15	3,600	3000
Set Ring	20	10,000	6400	Set Amulet	20	10,000	6400
Unique Ring	30	20,000	10000	Unique Amulet	30	20,000	10000
Normal Any	0	80	xxx	Normal Class	0	200	xxx
Magic Any	0	400	320	Magic Class	0	1000	800
Rare Any	15	2,000	1600	Rare Class	30	5,000	4000
Crafted Any	45	10,000	8000	Crafted Class	90	25,000	20000
Set Any	90	25,000	15000	Set Class	180	50,000	25000
Unique Any	135	50,000	25000	Unique Class	270	100,000	50000

Item	Collect	Extract	Upgrade	Item	Collect	Extract	Upgrade
Treasure Joker	10	xxx	xxx	Minor ChoM	500	5,000	xxx
Treasure Card 2	20	xxx	xxx	Major ChoM	2000	25,000	20000
Treasure Card 3	30	xxx	xxx	Mega ChoM	5,000	100,000	75000
Treasure Card 4	40	xxx	xxx	Minor Celeb Fragm	20	500	xxx
Treasure Card 5	50	xxx	xxx	Minor Celeb Poster	200	xxx	xxx
Treasure Card 6	60	xxx	xxx	Major Celeb Fragm	250	10,000	xxx
Treasure Card 7	70	xxx	xxx	Major Celeb Poster	5,000	xxx	xxx
Treasure Card 8	80	xxx	xxx				
Treasure Card 9	90	xxx	xxx	Cube Adder x2	100	10,000	xxx
Treasure Card 10	100	xxx	xxx	Cube Adder x3	250	15,000	5000
Treasure Card J	200	xxx	xxx	Cube Adder x5	500	25,000	10000
Treasure Card Q	300	xxx	xxx	Cube Adder x10	1000	50,000	25000
Treasure Card K	400	xxx	xxx	Cube Adder x20	2000	100,000	50000
Treasure Card A	500	xxx	xxx	Cube Lock	300	10,000	xxx
Treasure Card E	1,000	xxx	xxx	Demon Box	60	750	xxx
Treasure Card Z	2,000	xxx	xxx	Demon Key	120	1,500	xxx
				Elixir	50	150	xxx
Rej Potion	2	xxx	xxx	Zy-El Fragment	500	xxx	xxx
Full Rej Potion	6	xxx	xxx	Zy-El Scroll	4000	xxx	xxx

Item	Extract	Upgrade	Item	Extract	Upgrade
Chipped Gem	5,000	xxx	Chipped Skull	16,000	xxx
Flawed Gem	16,000	11,000	Flawed Skull	50,000	34,000
Gem	50,000	34,000	Skull	160,000	110,000
Flawless Gem	160,000	110,000	Flawless Skull	500,000	340,000
Perfect Gem	500,000	340,000	Perfect Skull	1,600,000	1,100,000
r01 (EI)	2,000	xxx	r18 (Ko)	180,000	140,000
r02 (Eld)	4,000	2,000	r19 (Fal)	240,000	180,000
r03 (Tir)	6,000	4,000	r20 (Lem)	320,000	240,000
r04 (Nef)	8,000	6,000	r21 (Pul)	400,000	320,000
r05 (Eth)	10,000	8,000	r22 (Um)	500,000	400,000
r06 (Ith)	12,000	10,000	r23 (Mal)	600,000	500,000
r07 (Tal)	14,000	12,000	r24 (Ist)	700,000	600,000
r08 (Ral)	16,000	14,000	r25 (Gul)	800,000	700,000
r09 (Ort)	20,000	16,000	r26 (Vex)	900,000	800,000
r10 (Thul)	24,000	20,000	r27 (Ohm)	1,000,000	900,000
r11 (Amn)	30,000	24,000	r28 (Lo)	1,200,000	1,000,000
r12 (Sol)	40,000	30,000	r29 (Sur)	1,400,000	1,200,000
r13 (Shael)	50,000	40,000	r30 (Ber)	1,600,000	1,400,000
r14 (Dol)	60,000	50,000	r31 (Jah)	1,800,000	1,600,000
r15 (Hel)	80,000	60,000	r32 (Cham)	2,200,000	1,800,000
r16 (Io)	110,000	80,000	r33 (Zy)	3,000,000	2,200,000
r17 (Lum)	140,000	110,000			
Magic Amulet	30,000	xxx	Magic Jewel	12,500	xxx
Rare Amulet	180,000	155,000	Rare Jewel	75,000	63,000
Crafted Amulet	1,155,000	1,000,000	Crafted Jewel	450,000	380,000
Magic Ring	15,000	xxx			
Rare Ring	90,000	77,000	Elixir	80,000	80,000
Crafted Ring	615,000	530,000	Cube Lock	7,200,000	7,200,000