This help file has been created for version 130821-1, but it will do well for later versions.

Background

CRY T!" is an optical superco#puter, however its lo$ic and ph%sical principles are different fro# that of #odern co#puters. &nstead of usin$ one silicon processor core for a sin$le calculation thread CRY T!" uses a photon cr%stal for lo$ical calculations with billions of si#ultaneous threads at a relativel% low fre'uenc%. &t is used at ( ) * laborator% for ph%sical #odelin$ of weapons and ar#or.

+,",-! is a CRY T!" $eneration and thread s%nchroni.ation al$orith#. &t also handles / 0& and #ost of other routines.

+owever, there is no use for this infor#ation in the $a#e... %et.

The game

1ro2ect +elena is a turn-based R1/3 trate$% $a#e.

The $oal of the $a#e is to destro% all co#puter bots on a rando# $enerated #ap.

%ste# re'uire#ents4

- o less than 1.2 / +. reco# #ended

56) b of free R!)

creen resolution no less than 10267858

Main menu

) ain #enu offers #ost of the $a#e setup. hort #enu help #a% be found b% clic9in$ on :) enu help; button.

&n the #ain #enu %ou can set the .oo# level.

:Resu#e $a#e button; resu#es the $a#e. &f the $a#e has not %et started or if the

$a#e is over the button is $ra%ed out. The sa#e thin$ is done b% clic9in$:) enu; button.

    : / enerate new #ap; button will $enerate a new #ap with the specified para#eters discussed below.

    : top the $a#e button; stops the $a#e ‹destro%s pla%er bots= and shows the #ap. Your pro$ress will be lost.

    :) enu help; and : / a#e help; buttons show a short hint on #enu options and $a#e controls.

    :>uit; button e7its the $a#e
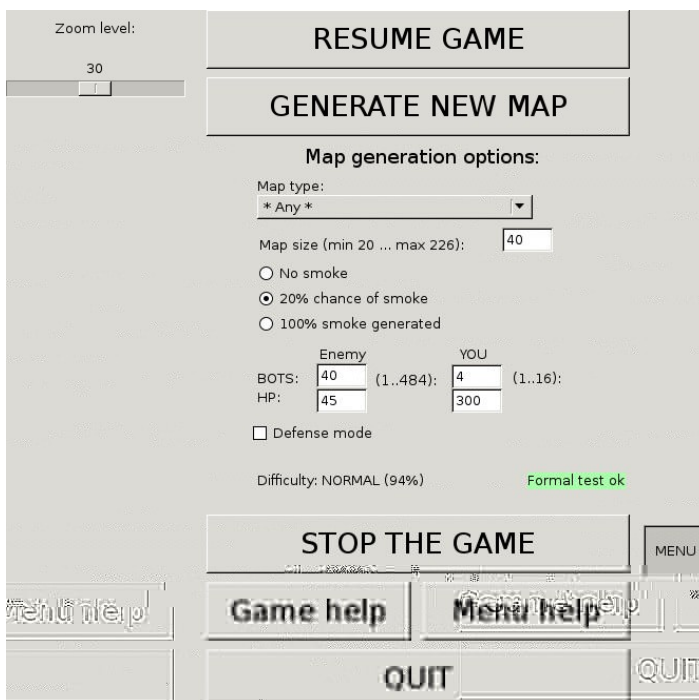
?i$.1. / a#e #ain #enu

    :@oo# level; slider sets the .oo# level of the $a#e fro# 20 to A0 tiles per screen and #a% not be $reater than current #ap si.e.
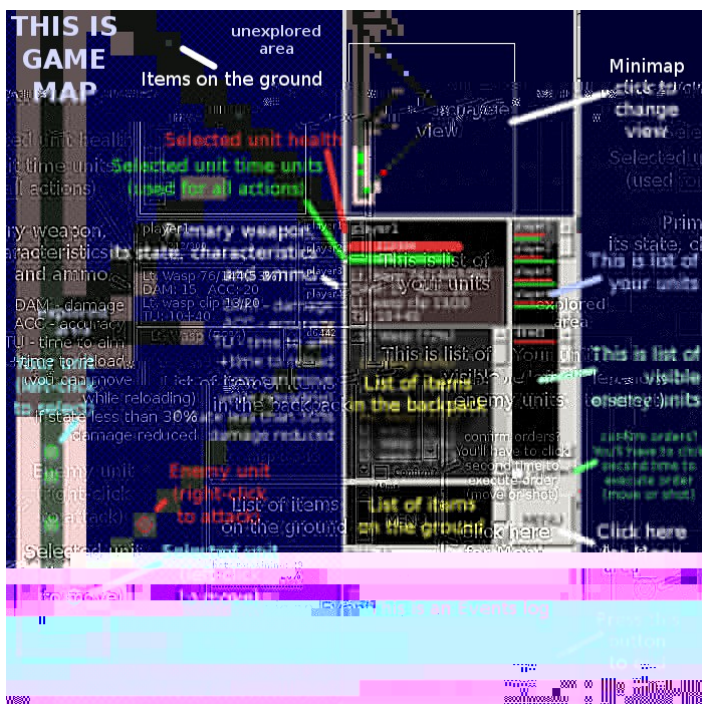

Game controls

    / a#e is #ainl% controlled b% #ouse.

    Left click will <u>select</u> %our bot or <u>#ove</u> it to a free space. You can also <u>select</u> %our bot b% lfet-clicking in the top-ri$ht list.

Right click will <u>select</u> and <u>attac9</u> ene#%. You can also <u>select</u> ene#% bot without shootin$ at it b% left-clicking in the #iddle-ri$ht list. &f the bot is in the line of si$ht then the selection cross will be red, else it will be %ellow. You can see ene#ies onl% in direct line of si$ht of %our bots.

Middle click will <u>center the #ap</u> around the tile clic9ed฿ You can also <u>#ove the #ap</u> b% left-clicking on the #ini#ap in the rit$ht-top of the ⁄0&.

Clic9in$: - e7t turn; button will start ene#% turn and replentish %our bots T0s. The $a#e lasts until all bots of one of the sides are destro%ed.

?i$.2. ⁄a#e controls

Confir# chec9bo7 enables %ou to decide whether %our bots ta9e action ‹shot or #ove= i##ediatel% after clic9 ‹'uic9er $a#epla%= or after second clic9 ‹saves fro# errors=.

,vent lo$ shows all events that happened this turn, ratio of the #ap e7plored and nu#ber of bots re#ainin$. ?irst turn after #ap $eneration event lo$ shows #ap infor#ation and statistics.

tems operations

Left click at : "ist of ite#s in the bac9pac9; will <u>select ite#</u> and the ne7t left-click

will e'uip the ite# ‹chan$e the weapon if weapon present or load a# #o if onl% a# #o clip is present=. &f an ite# is selected then clicking at a free space in the bac9pac9 will #ove it there.

!hift-left-click on ite# will drop it. !hift-left-click on e#pt% space in the bac9pac9 will unload a# #o clip fro# the pri#ar% weapon. "trl-left-click will re#ove a# #o clip fro# the selected weapon without e'uippin$ it.

&f there are ite#s on the $round at place where the bot stands ‹the list is not e#pt%= left click will select the ite# and another left-click will pic9 it up.

Right click at an e'uipped ite#, an ite# in the bac9pac9 or an ite# on the $round show its characteristics and description. ?or weapon with a# #o char$ed so#e basic esti#ates are also #ade.

Bot properties

, ach bot ‹%our and co#puter‹s= has4

+1	+it points.	(hen +1s reduce to 0 the bot is destro%ed.
T0	Ti#e units	T0s are spent for all actions. , ach bot has e'ual a#ount of T0s ‹2AA=. You cannot e7ecute action if re'uired a#ount of T0s is $reater than re#ainin$ a#ount. The T0s reset bac9 to #a7 at the ne7t turn.
	peed	! t this ti#e each bot‹s speed is e'ual to 30. This is the a#ount of T0s used for a hori.ontal or vertical step, dia$onal steps will cost 1.61 ti#es #ore. &t will be possible to chan$e this value b% up$rades in later versions.
	1ri#ar% weapon	The pri#ar% weapon is the weapon used for attac9in$ ene#% if the weapon has the a# #o the bot has enou$h T0s to ai#Dshot.
	&te#s	! t this ti#e onl% weapons and a# #o ite#s are i#ple#ented.
	Eac9pac9	, ach bot can carr% 12 ite#s ‹includin$ pri#ar% weapon=.

Map t#pes

The $a#e offers several rando# #ap t%pes. : F !n% F ; option will rando#l% pic9 one of these. You can also choose the #ap t%pes #anuall%.

Map t#pe	$ind	%escription	%ifficult#
F !n% F	-	Rando#l% pic9s an% of the below #ap t%pes.	-

Rando#	Rando#	Represents a rando# set of walls and passa$es. The #ost si#ple #ap t%pe.	!vera$e
Rando# circles	Rando#	The sa#e as :Rando#;, but $enerates several open areas in the #ap. "ar$e open areas re'uire careful attac9 for#ation.	+ard
Cocon	Rando#	The sa#e as :Rando#;, but $enerates a lar$e wall ele#ent at center.	!vera$e
Eloc9	Rando#	i#ilar to :Rando#; but $enerates lar$e roo#s instead of s#all bloc9s. !vera$e shot distance is usuall% $reater than for rando# #aps, however several bottlenec9s #a% be $enerated	!vera$e
Circles	Rando#	/enerates lar$e circular areas. "ar$e open areas re'uire careful attac9 for#ation.	+ard
!nticircles	Rando#	/enerates lar$e areas between circular wall ob2ects. "ar$e open areas re'uire careful attac9 for#ation.	+ard
*ia#onds	ta#p	/enerates dia#ond-li9e roo#s. "ot⎯s of place to hide, however lon$ shootin$ ran$es #a% be dan$erous	!vera$e
T-#ap	ta#p	) a.e-li9e #ap rese#blin$ #ines. /enerates #an% deadens and lon$ shootin$ ran$es. Re'uires careful unit for#ation.	,as%
"inearsinus	&rre$ular	/enerates #ap si#ilar to caverns. >uiet eas% #ap t%pe due to lar$e a#ount of bottlenec9s.	,as%
Recta$onal	Rando#	/enerates a lot of strai$ht passa$es. "on$ shootin$ ran$es re'uire careful e7ploration.	!vera$e
Roo#s	&rre$ular	/enerates a few strai$ht passa$es connectin$ avera$e-si.ed roo#s. Roo#s are usuall% areas of ene#% bots concentrations with little place to retreat.	!vera$e
Concentric	Re$ular	/enerates a set of circular passa$es with a pillar inside.	+ard
lant	ta#p	ta#p #ap t%pe. *ia$onal variation of :T-#ap;.	!vera$e
Eo7es	&rre$ular	/enerates recta$onal passa$es. /enerates a lot of lon$ shootin$ ran$es.	+ard
Concentric-full	&rre$ular	Gariation of :Concentric; #ap. #aller shootin$ ran$es #a9es the #ap easier.	!vera$e

, $$	Re$ular	/ enerates a circular shape structure var%in$ short and narrow passa$es and lon$ and wide ones which should be attac9ed with care.	! vera$e
- et	Re$ular	/ enerates a set of interconnected re$ular passa$es. "on$ shootin$ ran$es and little place to hide.	, as%
1 lus	ta#p	) ap rese#blin$ plus si$n. hort shootin$ ran$es and lots of turnarounds.	, as%
#all roo#s	ta#p	) ap with lots of s#all roo#s. hort shootin$ ran$es and lots of turnarounds.	Ger% eas%
&-#ap	ta#p	Croo9ed #ap with s#all shot ran$e. Ger% short shootin$ ran$es and lots of turnarounds.	Ger% eas%
?our #ap	ta#p	Croo9ed #ap with s#all shot ran$e. Ger% short shootin$ ran$es and lots of turnarounds.	Ger% eas%
?ive #ap	ta#p	Croo9ed #ap with lon$ shootin$ ran$es and narrow passa$es	! vera$e
*ash	ta#p	Croo9ed #ap with lon$ shootin$ ran$es and narrow passa$es	! vera$e
Rotor	Rando#	) an% passa$es at different an$les. "on$ dia$onal shootin$ ran$es.	! vera$e
, $$Re	Re$ular	Recta$onal variation of : , $$; with roo#s, var%in$ short and narrow passa$es and lon$ and wide ones.	! vera$e
nowfla9e	Re$ular	! re$ular set of star-li9e passa$es. o#eti#es #a% $enerate lon$ shootin$ ran$es.	! vera$e
! reas	&rre$ular	! set of lar$e interconnected open areas. , ach area #i$ht contain a lar$e nu#ber of ene#% bots, but presence of a hi$h a#ount of bottlenec9s #a9es the #ap easier.	! vera$e
(or#holes	&rre$ular	! set of wor#hole-li9e passa$es. ! vera$e shootin$ ran$es but wide passa$es.	+ard

:Rando#; #ap 9ind $enerates irre$ular rando# #aps with no specific lo$ic.

:&rre$ular; #ap 9ind $enerates an irre$ular set of passa$es with so#e re$ular lo$ic.

:Re$ular; #ap 9ind is a #ap stron$l% affected b% so#e $eneral lo$ic.

: ta#p; #ap 9ind is a #ap consistin$ of si#ilar ele#ents.

The difficult% for a specific #ap #a% be different fro# that of overall #ap t%pe and depends on peculiarities of the $enerated #ap, a#ount and place#ent of bots. &.e. s#all a#ount of bots ta9esadvanta$esof s#all shootin$ ran$es,swhile a,sw0 a#oue6 ta9esa aT 0 @wa8Tl

*ifficult% is esti#ated based on two para#eters co#parison⁴ total pla%er and ene#% +1 and total pla%er and ene#% firepower. ,ne#%-to-pla%er +1 ratio shows how #uch #ore da#a$e ene#ies can ta9e. ,ne#%-to-pla%er firepower ratio is esti#ated based on :avera$e ene#% bot densit%; and :avera$e shootin$ area; around the #ap which presu#es that pla%er firepower is concentrated while co#puter⒧s is not. This presu#ption is the source of difficult% esti#ation error because due to #ap peculiarities or rando# fluctuations ene#% fire #a% be #uch #ore concentrated than e7pected, while careful use of bottlenec9s to$ether with so#e luc9 #a% drop ene#% firepower al#ost to .ero. ?irepower is also calculated relative to so#e :avera$e wea9; weapon e⒱uipped and #a% be altered b% use of different weapons.

    ince version 130H0A-1 %ou can pre-set the #ap difficult%. The description of difficult% levels #a% be found in the table below.

&alues	⒱ualit#	%escription
0 I .. 8A I	,as%	>uiet eas% battle. ,ne#ies will hardl% attac9 %ou in $roups, #ostl% scattered around the #ap. ⒲hile bein$ careful enou$h %ou will alwa%s win.
8A I .. 1A0 I	-or#al	+arder, but not #uch harder. This ti#e there are #ore ene#ies in the #ap and conse⒱uentl% the% will appear in $roups. +owever, in case %ou are careful enou$h %ou will alwa%s win.
1A0 I .. 22A I	+ard	⒨ore ene#ies. ⒨o#eti#es %ou will be outnu#bered. *ependin$ on %our luc9 and #ap peculiarities %our chances to win are around 50 I -80 I with careful #ap e7ploration and $ood tactics.
22A I .. 320 I	Ger% hard	The #ap is swar#in$ with ene#% bots. ,ven the best #ista9e-free tactics will so#eti#es fail. Chances to win are around 30 I -60 I .
over 320 I	&nsaneJ	Knl% stron$ luc9 #a% provide victor% in this case.

    1lease, pa% attention, that difficult% in :defense; or :ba.oo9a part%; #ode #uch #ore depends on the #ap peculiarities and the esti#ate #a% be inade⒱uate.

    ⒨oreover, it should be noted that true difficult% #a% be si$nificantl% different due to #ap peculiarities, which cannot be included in for#al difficult% esti#ate. ,.$. a #ap with 80 I difficult% #a% appear rather hard and 2A0 I difficult% esti#ated #ap #a% appear ⒱uiet eas%.

    ⁄raphicall% difficult% #a% be presented as below based on 38 battles. The plot shows

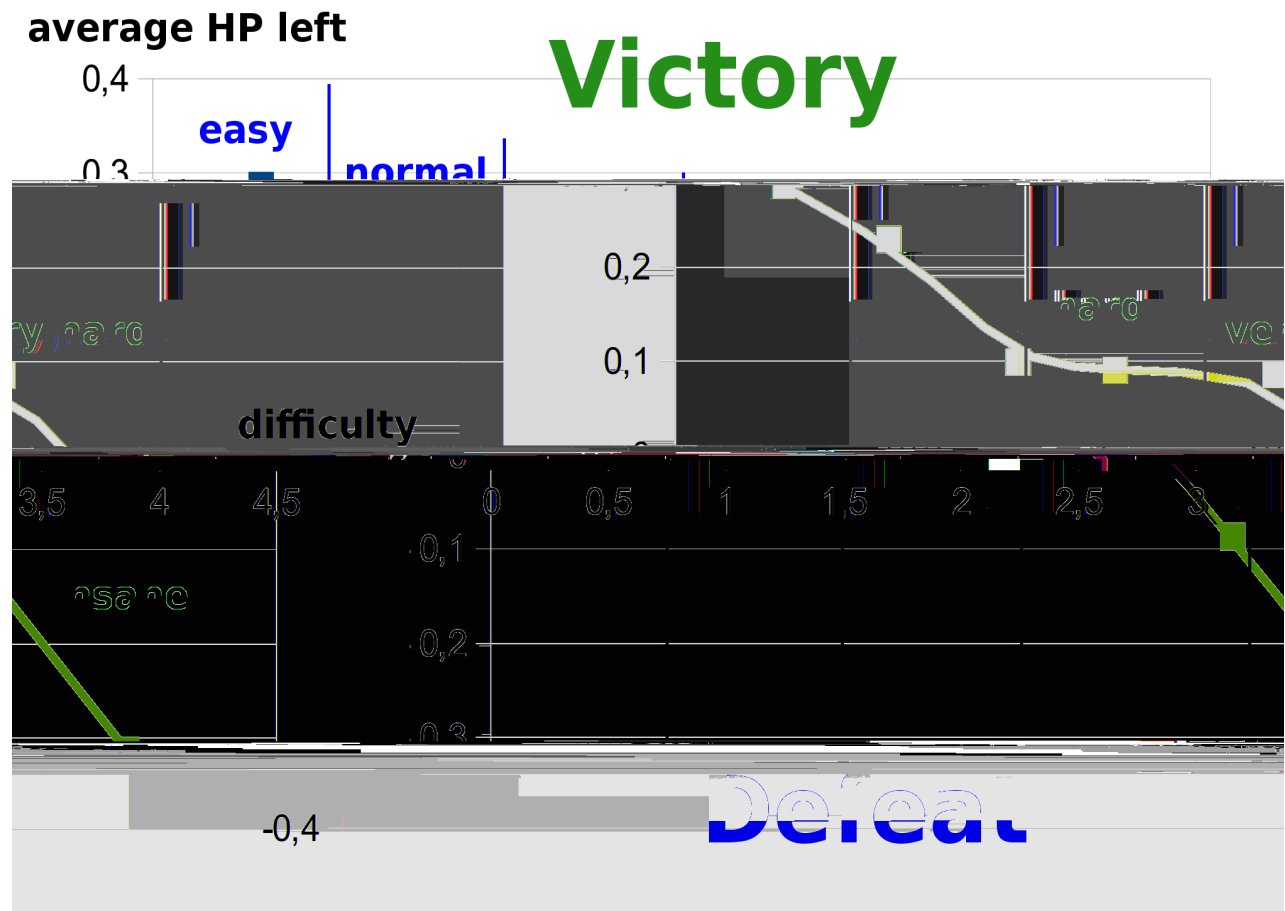percenta$e of +1s left after the battle versus difficult% level.

average HP left

0,4

easy

0.3 **normal**

Victory

0,2

0,1

difficulty

hard ve

3,5　　4　　4,5　　　0　　0,5　　1　　1,5　　2　　2,5　　3

-0,1

nsane

-0,2

-0.3

-0,4 **Defeat**

?i$. 3. *ifficult% $raph.

（ eapons ） ammo

（ eapons are used to shot a##o at ene#%. The weapons have the followin$ characteristics4

* !)	*a#a$e	*a#a$e is the a#ount of da#a$e caused b% the weapon in close-ran$e shot. The stat bloc9 shows su# of weapon and a##o * !) .
! CC	! ccurac%	The da#a$e reduces with distance to tar$et. +i$her the accurac% enables less da#a$e reduction with distance. You cannot attac9 ene#% too far awa% ‹further than current bot visible ran$eꓭ this is a bu$﹦ The stat bloc9 shows su# of weapon and a##o ! CC.
	tate	（ eapons are li$htl% da#a$ed b% shootin$ and pri#ar% weaponr% $ets severel% da#a$ed b% ta9in$ da#a$e. &f the bot is destro%ed the pri#ar% weapon is additionall% da#a$ed and its a##o a#ount is reduced. &f weapon state is less than 33 I then da#a$e #ade will be reduced until weapon ₂a##ed and unable to shoot.
	) a7state	
	T 0	hootin$ re'uires ti#e to ai# and to rechar$e ‹TuL10M60 #eans 10T 0 to ai# and 60 to rechar$e﹦. （ eapon is auto#aticall% rechar$ed if a##o clip is not e#pt%. ! ttac9in$ ene#% will force weapon to rechar$e ‹if itₗs not read%﹦ and then ai#. You can #ove while recharin.
	0 sable a##o	, ach weapon can use specific a##o t%pes. &.e. %ou canₗt use ?alcon a##o for （ asp.
	, 7plosion	o#e a##o are e7plosive. This #eans that after direct i#pact da#a$e e7plosion deals additional da#a$e to this and nearb% tar$ets. &n avera$e e7plosion da#a$e is about : , 7plosion; value divided b% : , 7plosion area; value.
	#o9e	, ach e7plosion $enerates s#o9e in its e7plosion area.
	, 7plosion area	The e7plosion power is concentrated on a specific area. &f the e7plosion ta9es place at open areas the e7plosion stren$th is dissipated 'uic9l%. +owever e7plosions at narrow passa$es deal #uch #ore da#a$e. , 7plosions can push tar$ets if stron$ enou$h. Ee careful. , 7plosion can da#a$e %our own bots and can burst fro# narrow passa$es to lar$er distances than e7pected. , 7plosions can also travel around the corners.

! s far as there is no weapon description in-$a#e %et, the infor#ation #a% be found in this help file.

(asp *eapon class+

"t. (asp is a basic and avera$e accurate weapon. (asp is a #odified version of li$ht ar#or piercin$ cannon.

+v. (asp is a heav% #odification of "t. wasp. "ess accurate but #ore powerful. lower to rechar$e. &t(s the #ost powerful weapon in low-to-#id ran$e.

niper (asp is a ver% accurate #odification of "t. wasp. &t(s best for lon$-ran$e shots.

	"t. (asp	+v. (asp	niper (asp
* !)	M0	MA	M0
! CC	M20	M0	M100
! i# ti#e	10 T0s	10 T0s	1A T0s
Rechar$e ti#e	60 T0s	A0 T0s	60 T0s
Chan$e clip	A0 T0s	100 T0s	100 T0s

(asps can use the followin$ a# #o t%pes4

"t. wasp clip is a basic a# #o t%pe with it(s #odification as e7tended wasp clip with 30 instead of 20 a# #o.

+v. wasp clip is #ore heav% wasp a# #o with lower clip capacit%.

! cc. wasp clip is an accurate version of "t. wasp clip. *ealin$ sli$htl% #ore da#a$e than a "t. wasp clip it has #uch hi$her accurac% bonus.

	"t. wasp clip	, 7t. wasp clip	+v. wasp clip	! cc. wasp clip
* !)	M1A	M1A	M20	M15
! CC	M0	M0	M0	M80
Clip si.e	20	30	10	12

,alcon *eapon class+

 t.?alcon is a standard heav% cannon. low rechar$e rate enables onl% one shot per turn, but it deals a lot of da#a$e.

* !)	M0
! CC	M10
! i# ti#e	50 T0s
Rechar$e ti#e	1A0 T0s
Chan$e clip	200 T0s

?alcons can use the followin$ a# #o t%pes4

	t. ?alcon clip	, 7pl. ?alcon clip
* !)	M130	M10
! CC	M0	M0
Clip si.e	8	8
, 7plosion	30	HHH
#o9e	10	A0
, 7plosion area	3	25

 tandard ?alcon clip is a re$ular powerful a# #o dealin$ hi$h a#ount of da#a$e with wea9 e7plosion dealin$ A-8 points of da#a$e.

 , 7plosion ?alcon clip does not do #uch direct da#a$e, but powerful e7plosion deals about 50 da#a$e points to the tar$et and over 30 da#a$e to ad2acent tar$ets. (hen concentrated in s#all passa$es e7plosion can cause over 80 points of da#a$e.) oreover hi$h e7plosion area #a% cause e7plosion wave to travel over a do.en #ap s'uares if e7plosion ta9es place in a narrow passa$e.