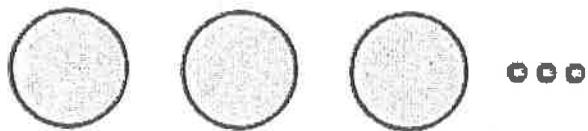


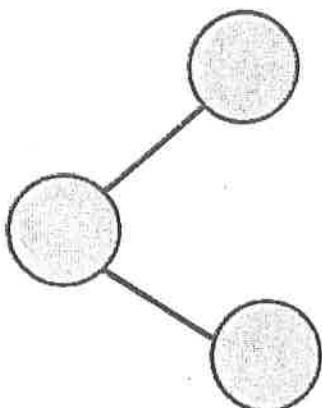
Number of nodes



Duration can be the numbers of pitch.

Duration can be the numbers of pitch.

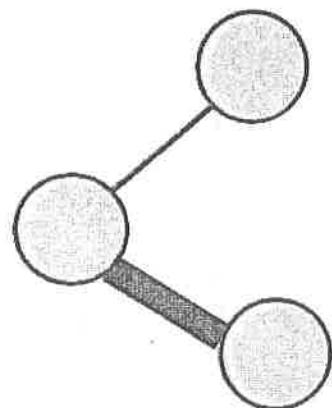
How nodes are connected



Duration, intonation, it's

Harmony, on how the connection goes

Strength of node connections

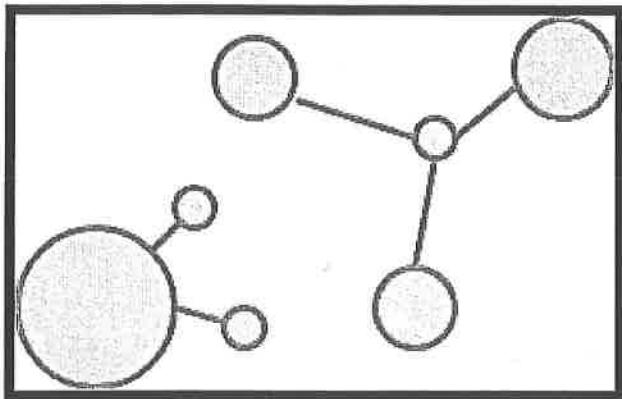
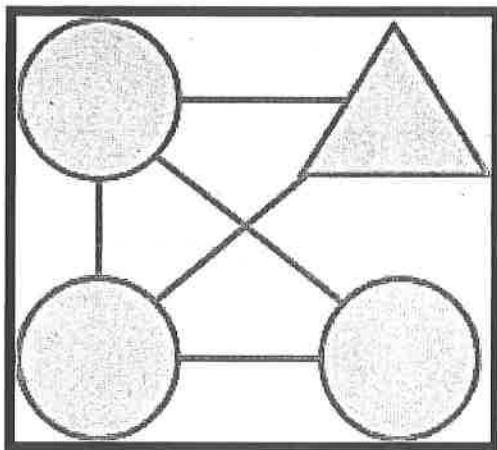
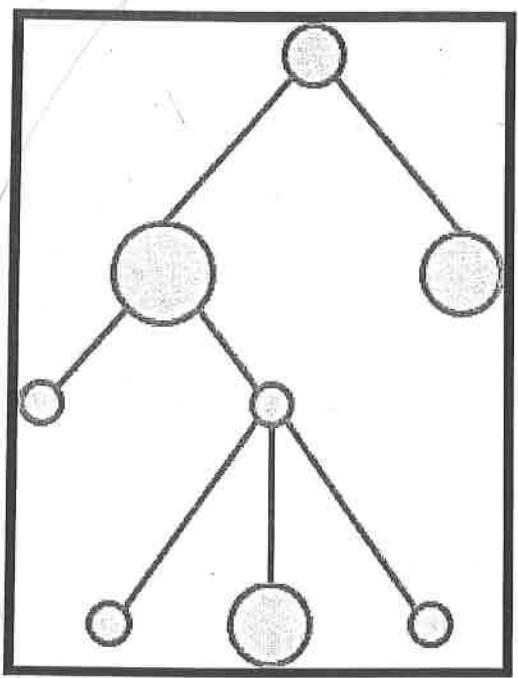


Volume, the more strength the higher the volume.

Node shapes

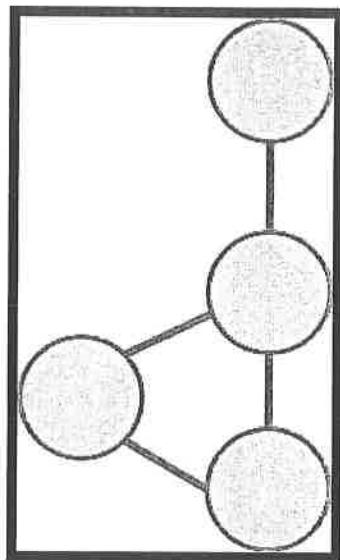
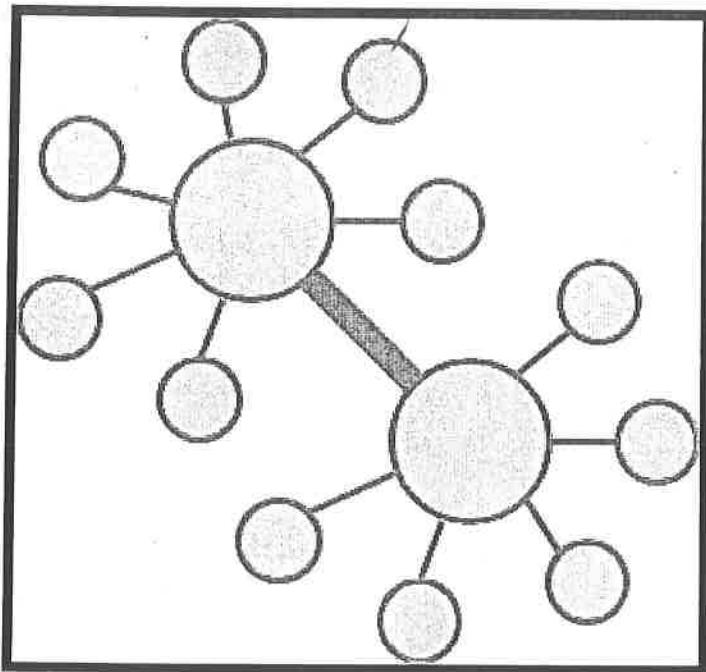
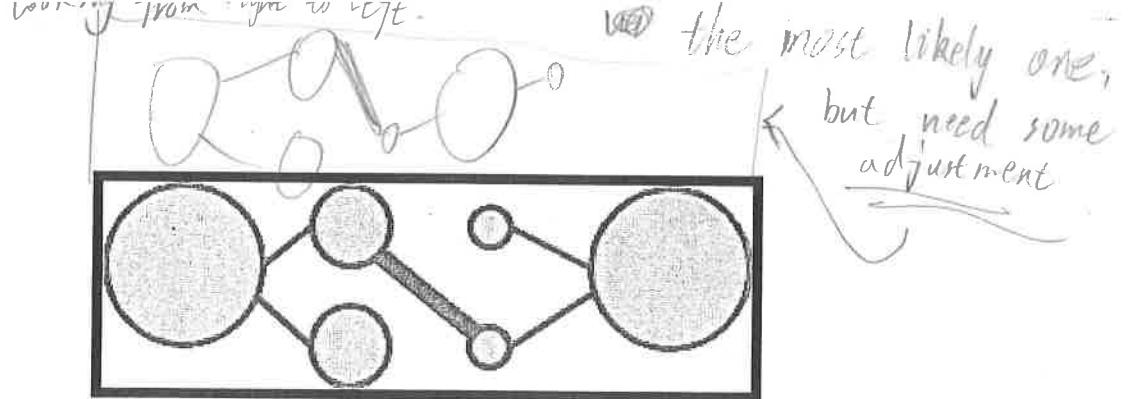


Pitch can be represent in different shapes.



Please justify your choice:

If look the graph from the top to down
then the numbers of nodes will match
what's playing.



Lack
the
pitch
and
harmony

← don't have begin and ending

Please justify your choice:

None of the graph match 100%.

What is your major? G: Game Design / AGPM proposing.

What is your gender? Male.

Before this exercise how familiar were you with the features of networks?

Bit on data structure, from basic to tree graph

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Yes.

reorder', from elementary school

to mid high.

What genres of music do you listen to?

Almost all, except metal/heavy rock, you can check here

Do you often hum or sing to yourself?

Not much.

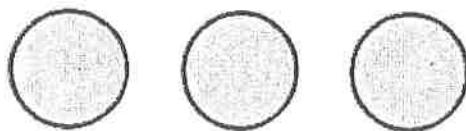
Name 3 networks that you are most often in contact with.

bilibili.com ←

Weibo.

google drive.

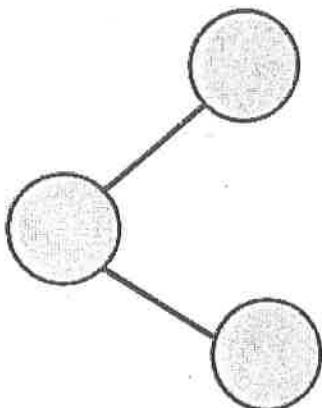
Number of nodes



... Rhythm

It's often represented as beats over time,
such as a time signature: 4 nodes = ~~|||||~~ $\frac{4}{4}$ time

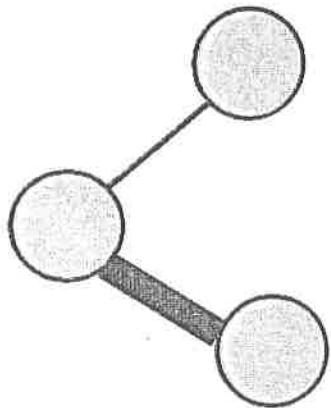
How nodes are connected



Melody

A melody is a phrase of connected notes.
It's not arbitrary: order & position matter.

Strength of node connections



Volume

This seems the most obvious to me, with thin lines being quiet, thick lines being loud.

I've noticed people ~~tend~~ tend to struggle accurately perceiving volume, however. I'm wondering how clearly it would map in practice, not just in theory.

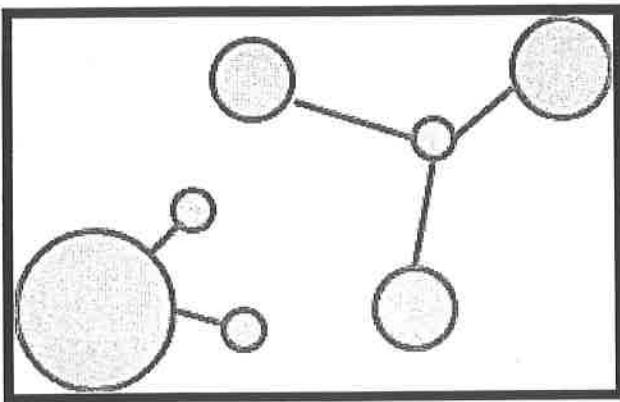
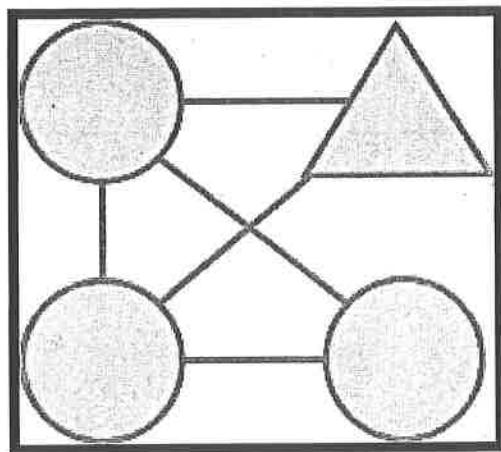
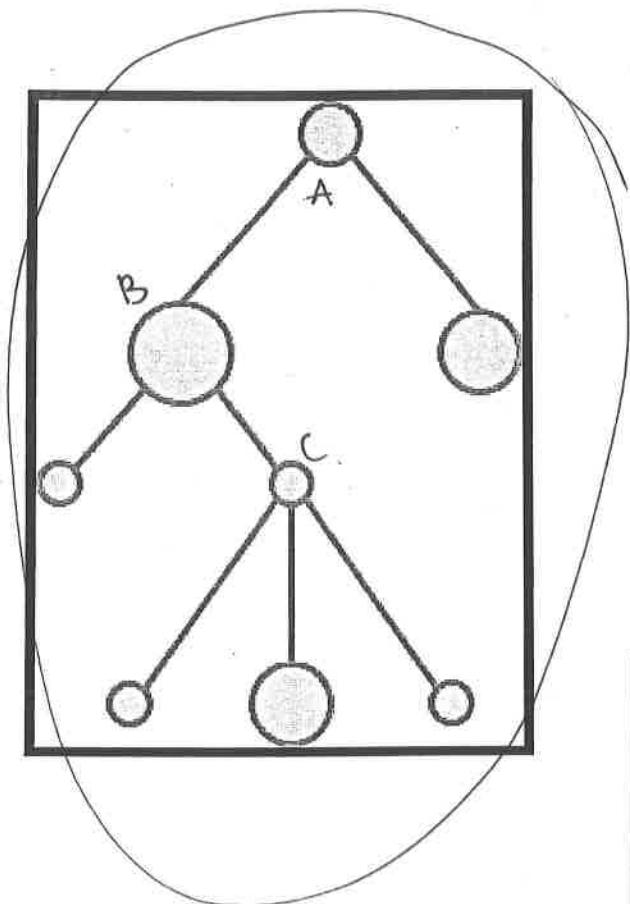
Node shapes



...

Timbre

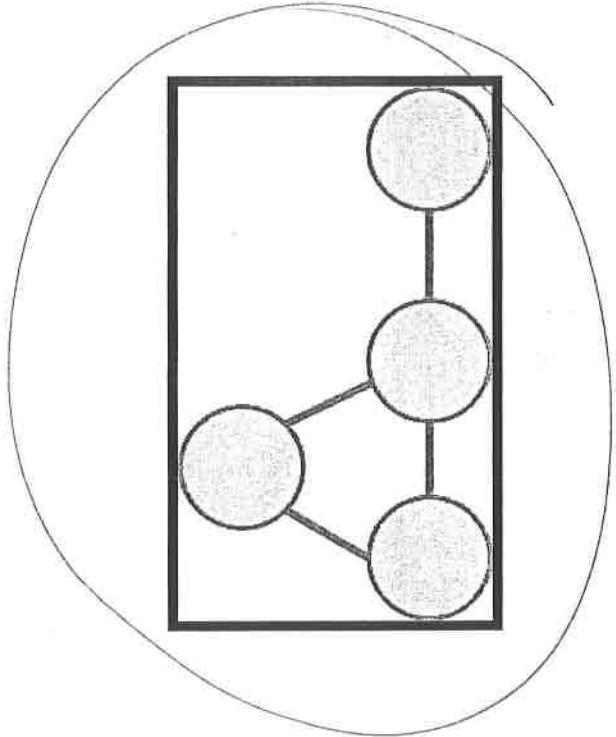
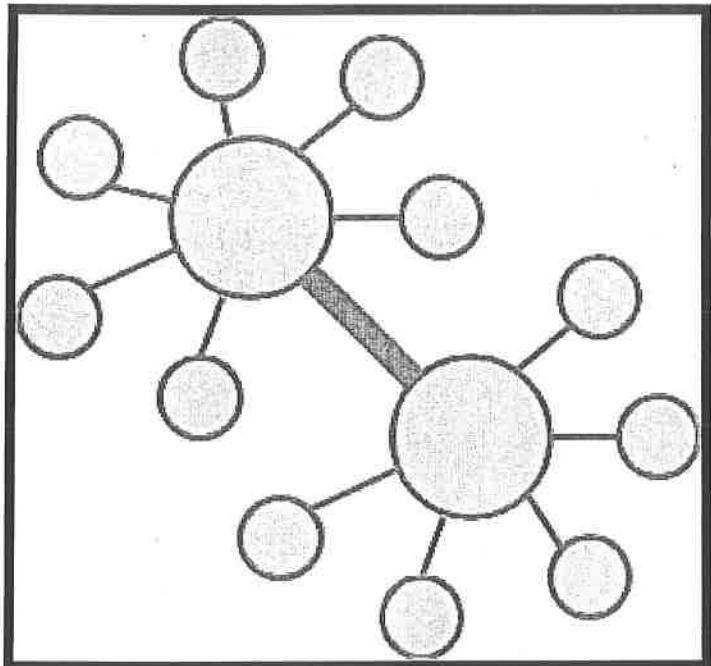
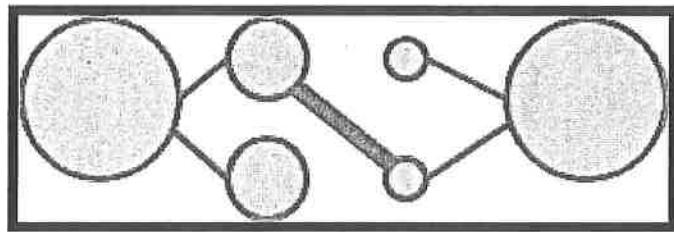
Any instrument can play the same note, but an E. Keyboard sounds "Rounder" than a Sawtooth synth.



Please justify your choice:

the graph feels linear and so does the music. There is no difference or change in instrumentation, and there are no significant pauses. Just moving from one chord to the next.

Maybe ~~is~~ the parent nodes (I labeled A, B, C) are the full chords, and the leaf nodes are the single leading tones. between the chords. The connection between B & C is the shortest and ~~is~~ the second chord in the music ~~is~~ is the shortest duration



Please justify your choice:

the top node being the keyboard by itself, then feels like it splits into the jingling, echoing tones, then into the high-pitched downward sweep. At the end it feels like it converges again, hence the connection between the bottom 2 nodes

What is your major?

Computer Game Design

What is your gender?

Non-binary

Before this exercise how familiar were you with the features of networks?

Apparently not at all. Those terms are foreign to me

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Yes. Guitar + Piano since ~3rd grade

What genres of music do you listen to?

Folk, Electronic, Experimental

Do you often hum or sing to yourself?

Yes.

Name 3 networks that you are most often in contact with.

The city bus

Discord

Tumblr

Number of nodes

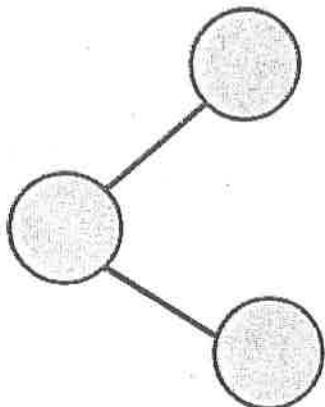


...

Rhythm

How often the particular node is played

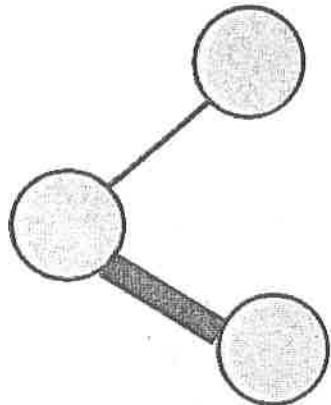
How nodes are connected



Melody

How the nodes are connected together as it is played.

Strength of node connections



volume The narrow vs. thick connections shows the volume.

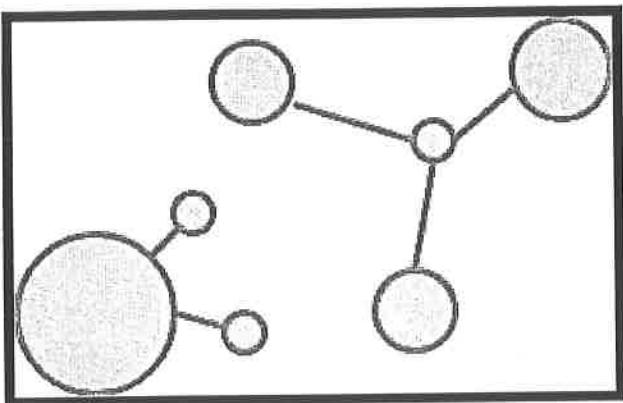
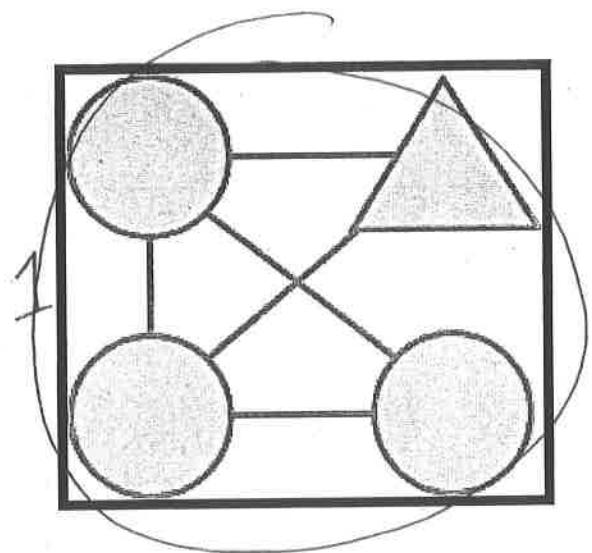
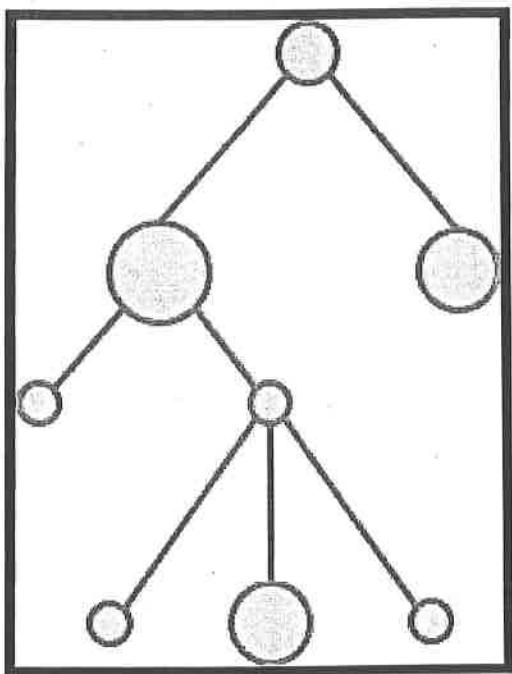
Node shapes



...

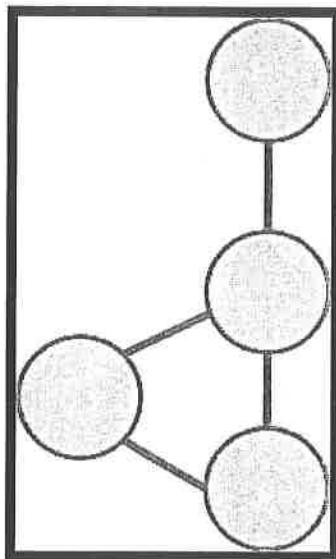
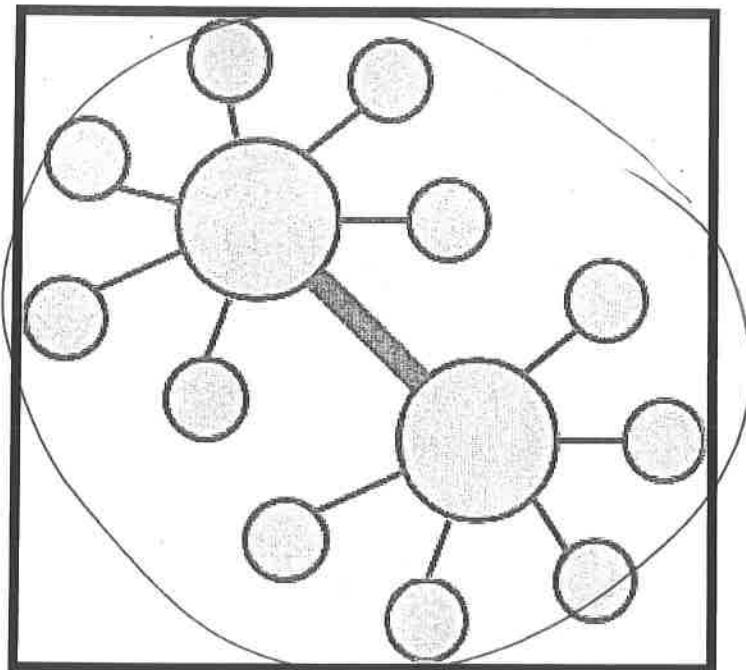
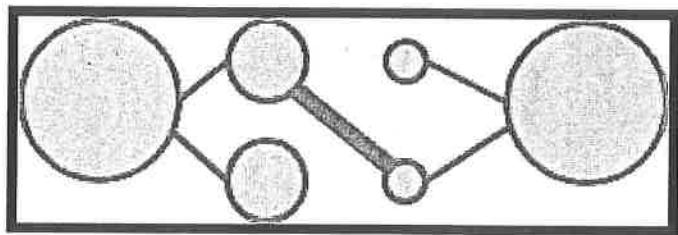
timbre

Different shapes gives different interpretations



Please justify your choice:

The 1st connections and the one different note made it seem like it would be this option.



Please justify your choice:

The first note is louder (thick) and
the way they are played with each other
seems to match. The chiming in the end
signify the small circles

What is your major?

AGPM: Game Design (ART)

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

not too well, but enough

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

I played percussion and learned music theory

What genres of music do you listen to?

Punk, Alternative, Lo-Fi, Kpop

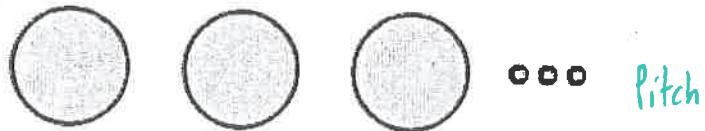
Do you often hum or sing to yourself?

yes

Name 3 networks that you are most often in contact with.

Clubs, housemates, Family

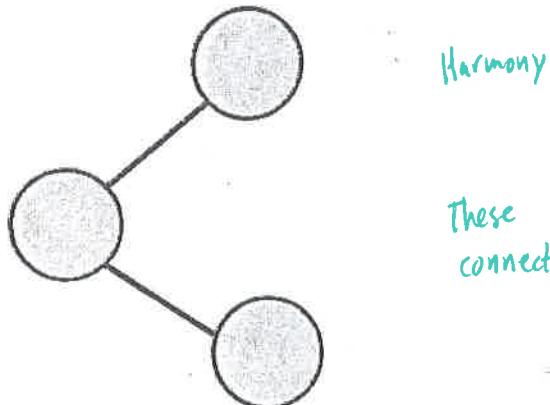
Number of nodes



... Pitch

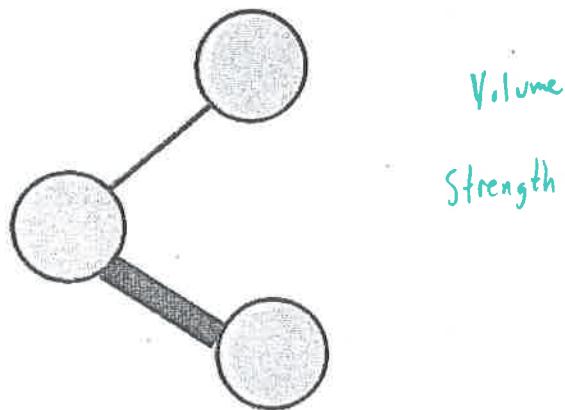
These nodes can represent Do Re Mi

How nodes are connected



These notes are connected much like the nodes are connected

Strength of node connections



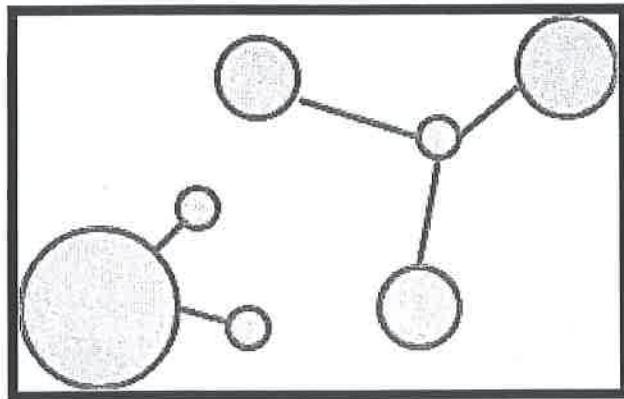
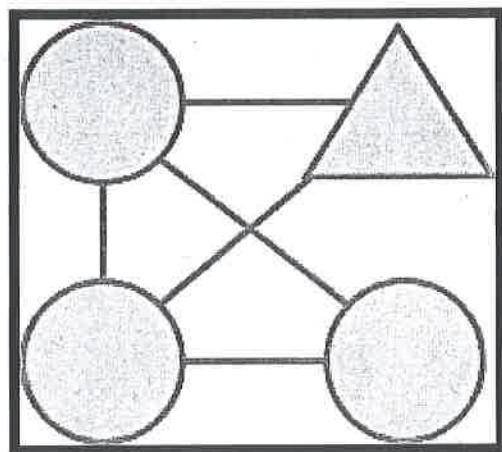
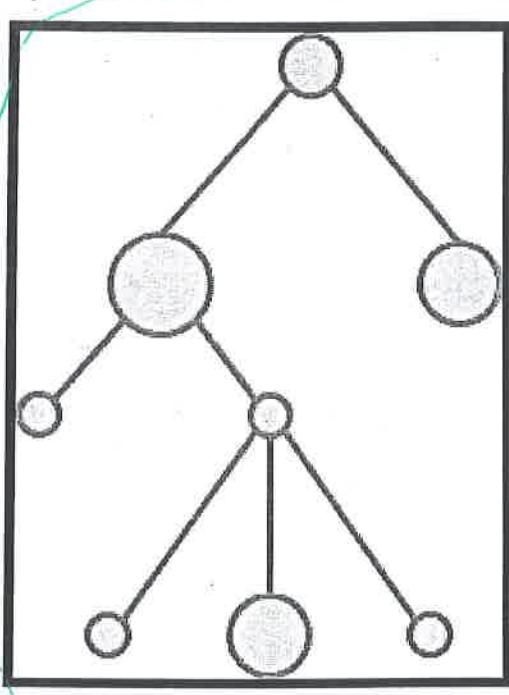
Strength = how loud the note is

Node shapes



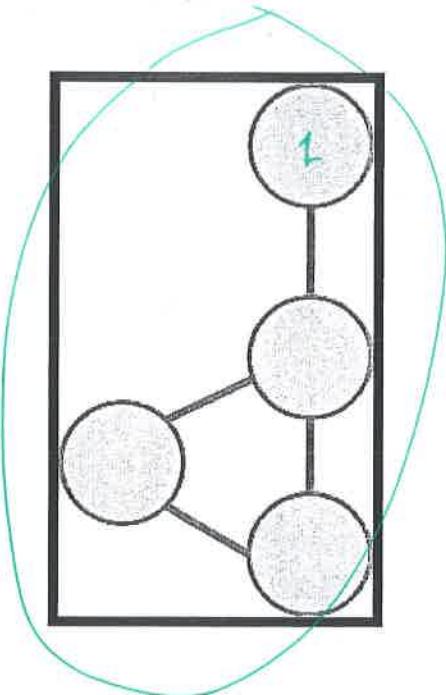
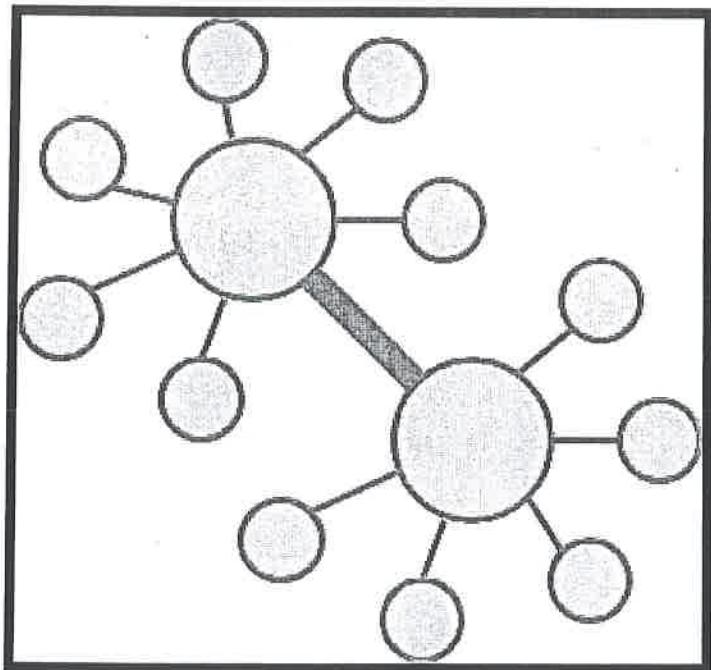
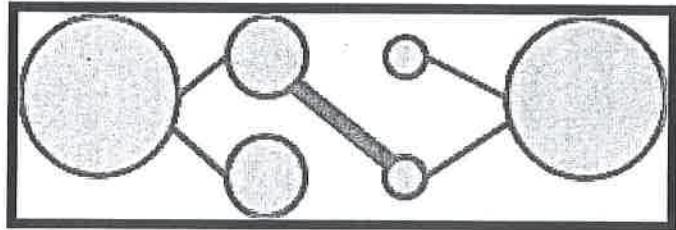
Timbre

These different shapes represent the kind of different instruments the note is being played from.



Please justify your choice:

I don't have any other justification other than it makes sense in my head that these two are correlated.



Please justify your choice:

The node marked 1 represents the first note that has a longer duration, which leads to the other harmony of notes that is represented by the 3 nodes connected.

What is your major?

Cognitive Science BS

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

0

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Yes, I played trumpet for 4 years.

What genres of music do you listen to?

Hip, Indie, Electronic, Shoegaze

Do you often hum or sing to yourself?

Yes

Name 3 networks that you are most often in contact with.

Bus Network

Social Media

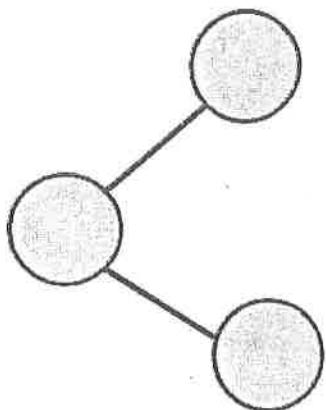
Family Tree

Number of nodes



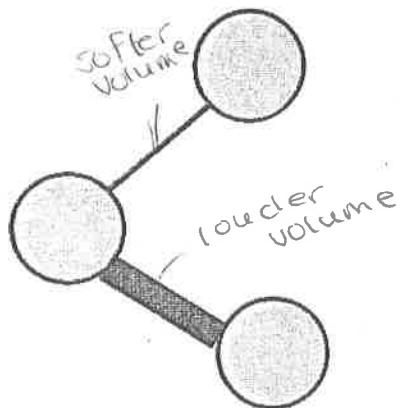
... Harmony because the number of nodes map how many notes are being played at once

How nodes are connected



Melody because it's how the notes are connected together to form more complex sound

Strength of node connections



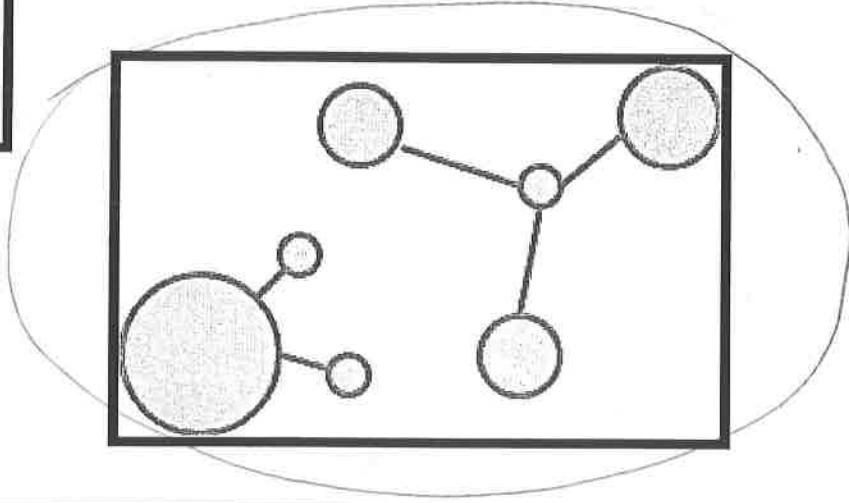
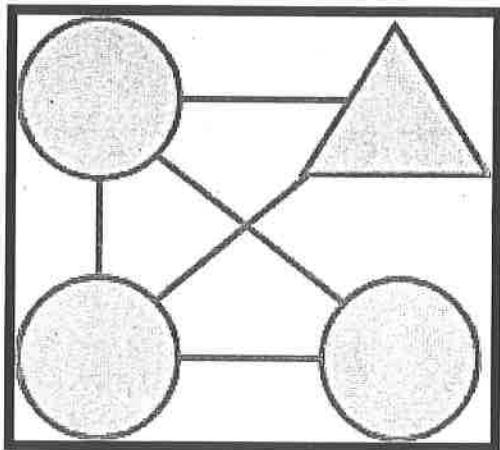
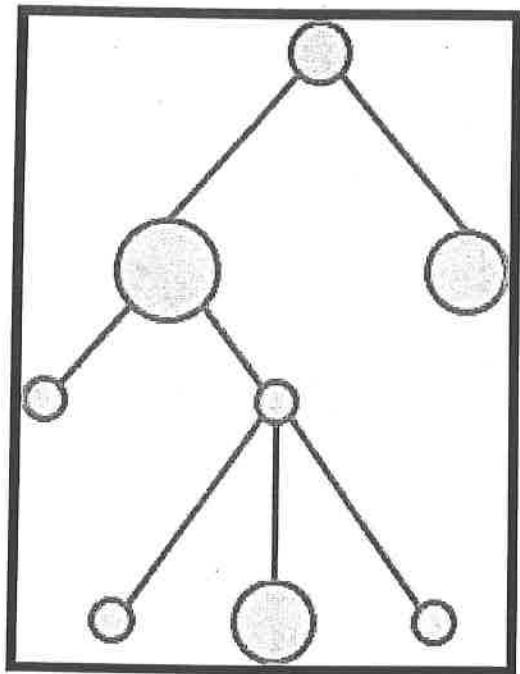
Volume because the louder the note the stronger the connection.

Node shapes



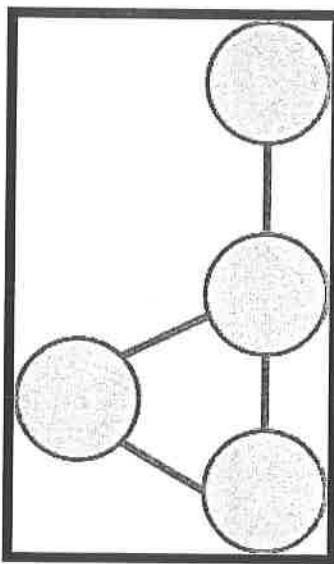
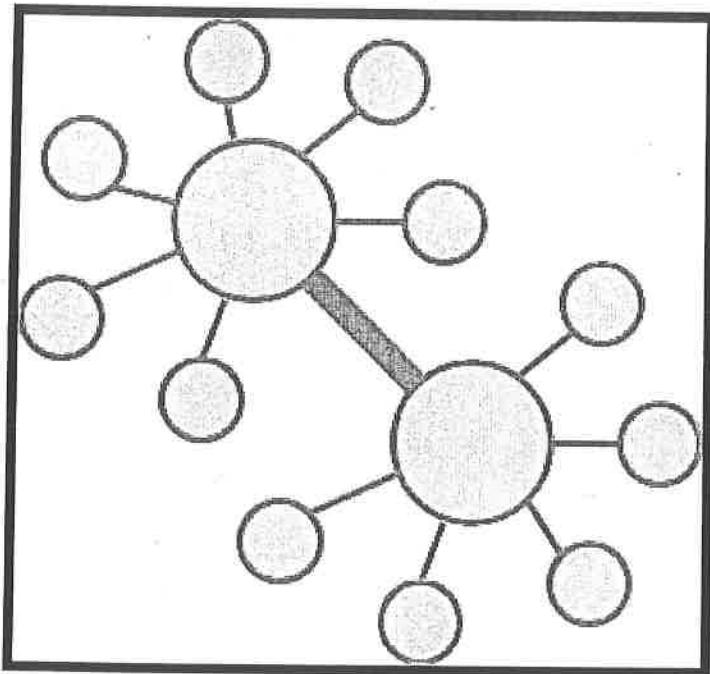
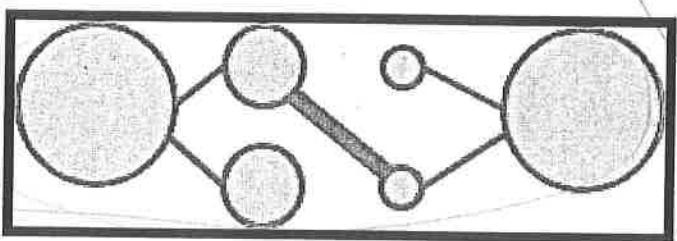
...

Timbre because different shapes represent the different colors of notes.



Please justify your choice:

I chose this one because there is a break in the music so there are two disconnected networks of nodes representing the disconnect since they are not connected!



Please justify your choice: I chose this one because it started and ended with the same sound represented by the two nodes which are the same on either end

What is your major?

Cognitive Science

What is your gender?

Female

Before this exercise how familiar were you with the features of networks?

somewhat familiar mostly w/ neural networks
↳ used in cognitive science

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

I played piano from when I was four
years old through middle school

What genres of music do you listen to?

A variety including pop

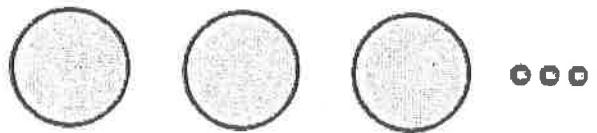
Do you often hum or sing to yourself?

I sometimes hum

Name 3 networks that you are most often in contact with.

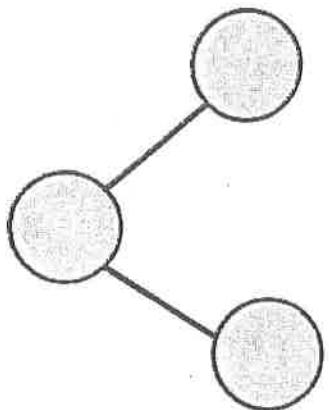
Social networks
neural networks
Maps

Number of nodes



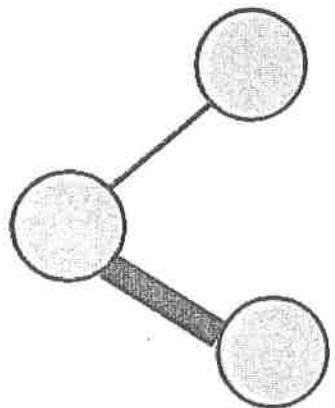
Melody, how many notes are played in the sound.

How nodes are connected



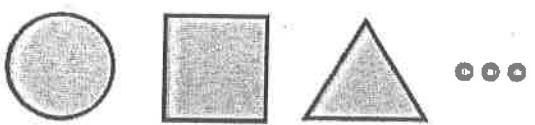
Rhythm, describes how one note goes to the next.

Strength of node connections

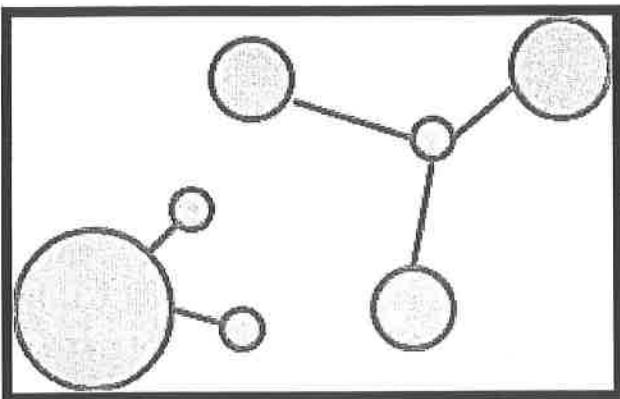
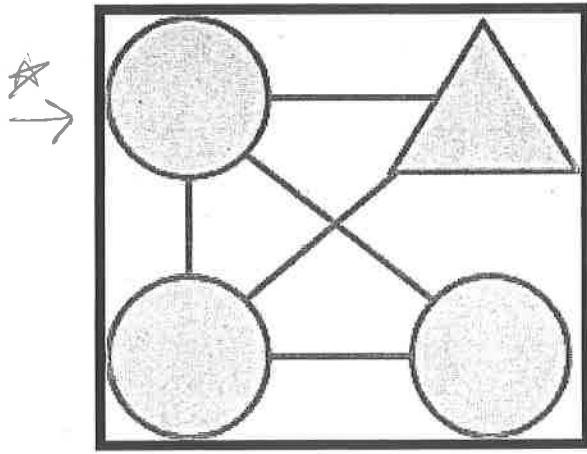
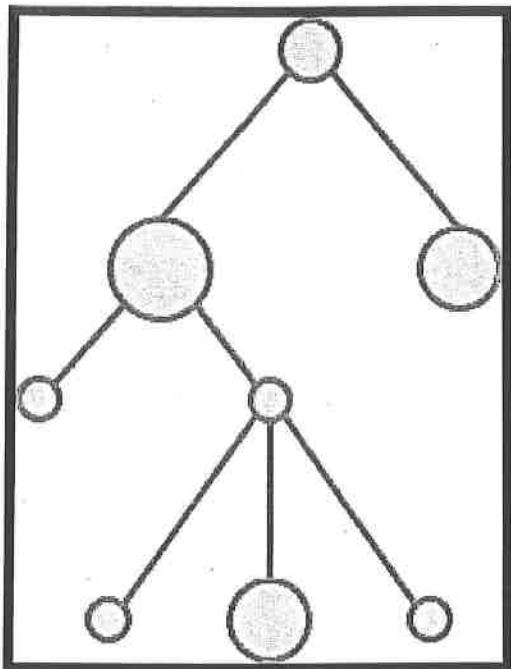


Duration, the stronger the connection the longer it is played.

Node shapes

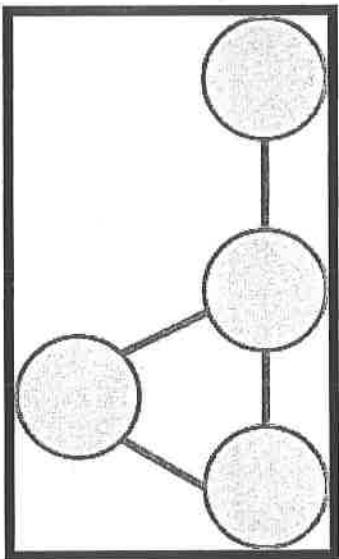
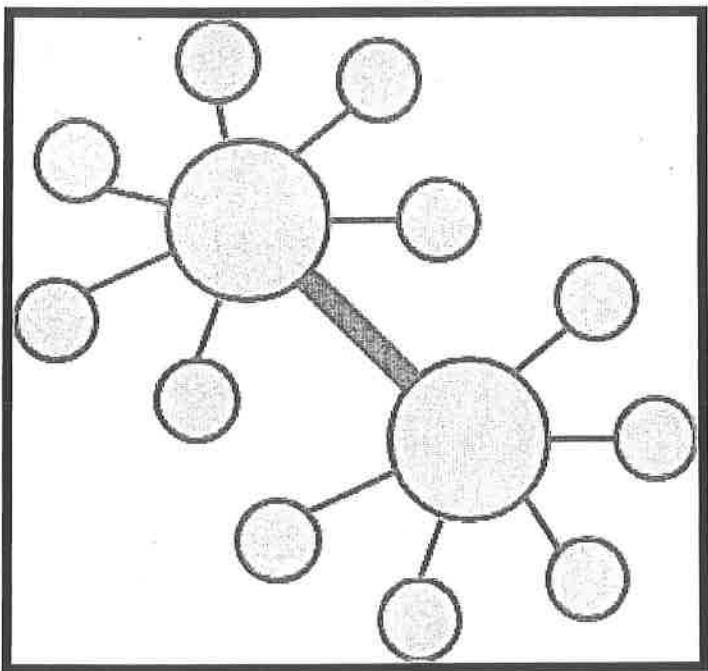
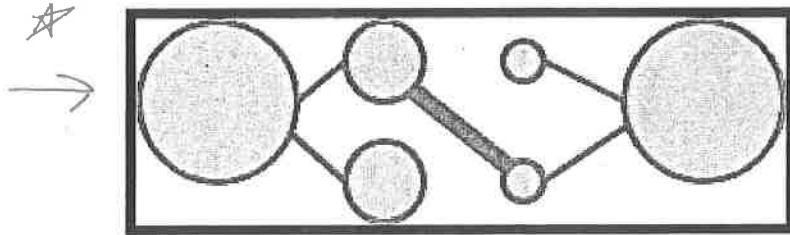


Pitch, different shapes describe what place to play the note at.



Please justify your choice:

I chose this one because it sounds like all notes are played at once and then individually, and it sounds like 3 are the same but one is different.



Please justify your choice:

I chose this graph because after the initial note is played, it sounds like two more are played but one is held until the next note.

What is your major?

Art & Design: Games and Playable Media.

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

I knew networks existed but I've never heard of a network through sound.

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

I used to play guitar when I was 13 to 14 years old.

What genres of music do you listen to?

Rap & indie/alternative

Do you often hum or sing to yourself?

Yes

Name 3 networks that you are most often in contact with.

Instagram, Snapchat, Discord

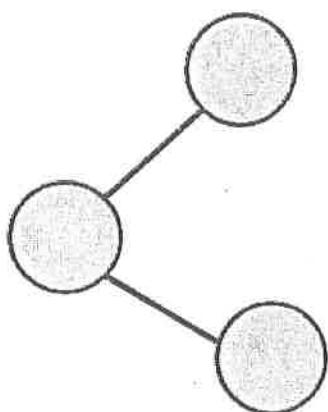
Number of nodes



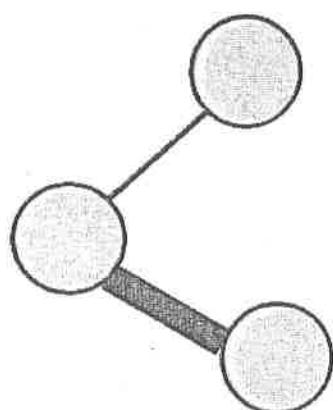
...

~~Length of Rhythms~~
Duration, # of nodes = how long it lasts.

How nodes are connected



~~Harmony, over time + multiple nodes~~
Pitch, different levels = different pitches



Strength of node connections

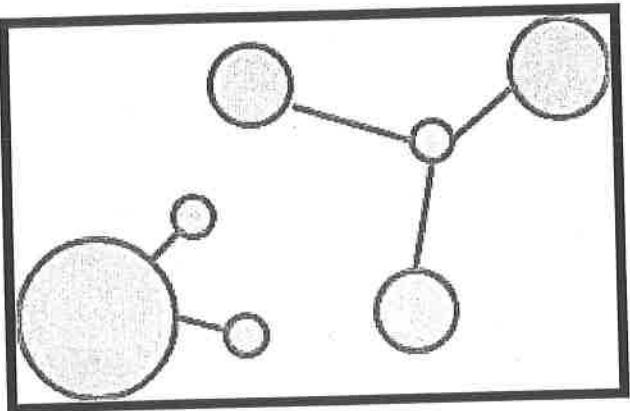
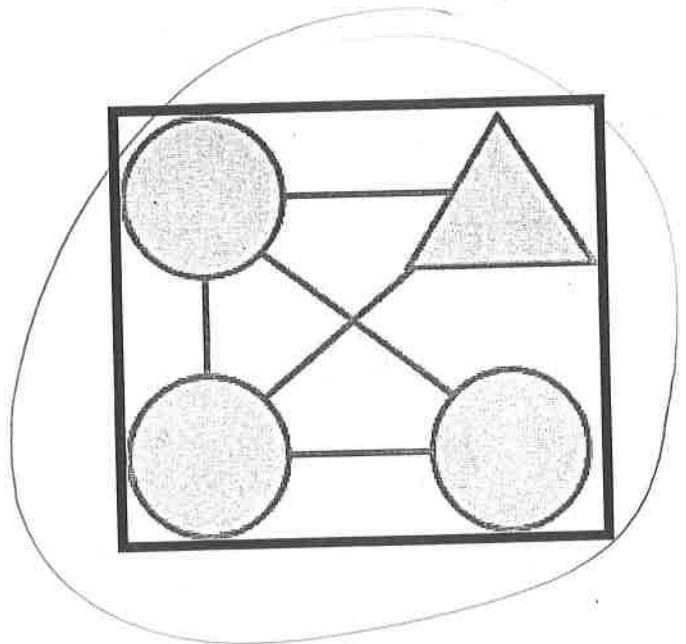
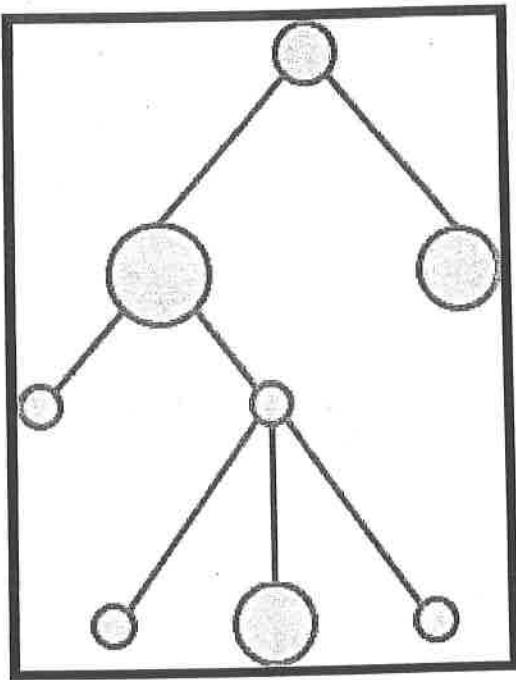
Volume; the stronger the connection,
the louder the next note is played, like
a stronger connection.

Node shapes



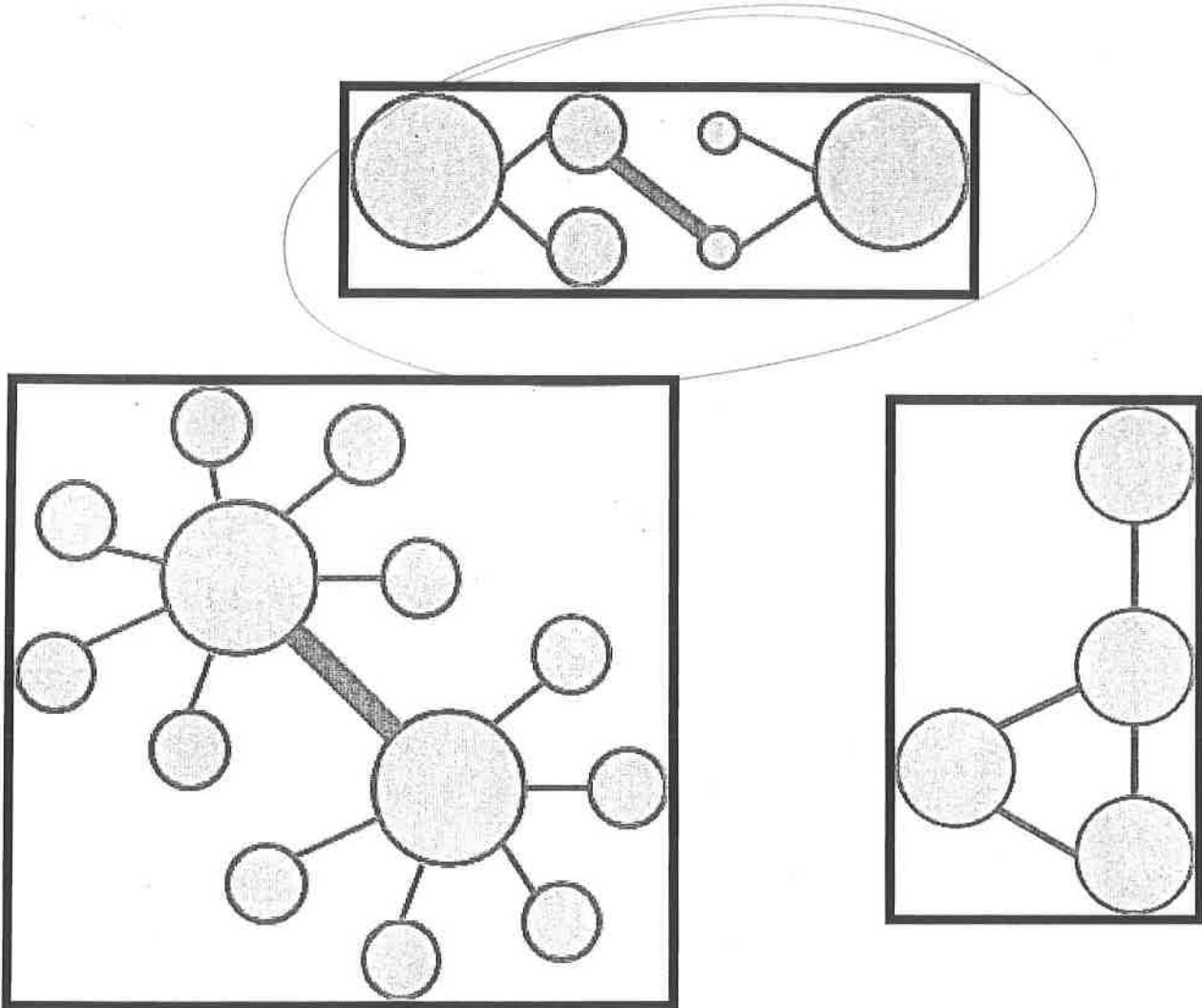
...

~~Timbre~~ Timbre, different
shapes equal different timbres



Please justify your choice:

Note, since I feel the others & harmonic
don't match these images
the mapping of pillars match.
↳ harmony



Please justify your choice:

I feel that the image indicates the different shifts corresponding with the music when traversing the graph.

What is your major?

Computer Science & Creative Arts

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

Yes

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Yes. Piano (7 - 12). Voice (5 - 23)

What genres of music do you listen to?

Any

Do you often hum or sing to yourself?

Yes

Name 3 networks that you are most often in contact with.

Game, Social Media, theatre.

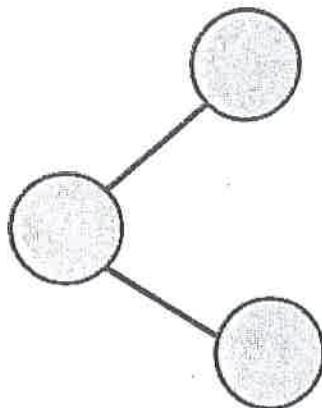
Number of nodes



ooo

Pitch because it's like a type which could be represented by each note

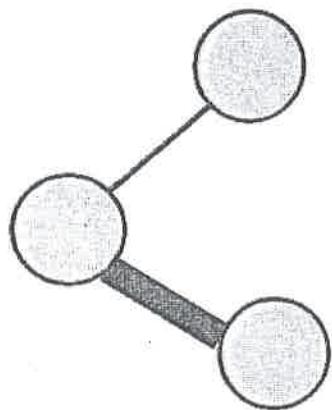
How nodes are connected



Melody because it involves sounds happening together

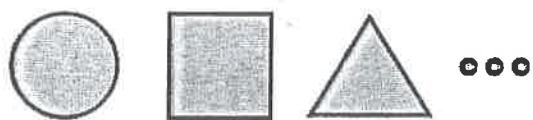
Strength of node connections

Because strength could be like changes (in time & sound)

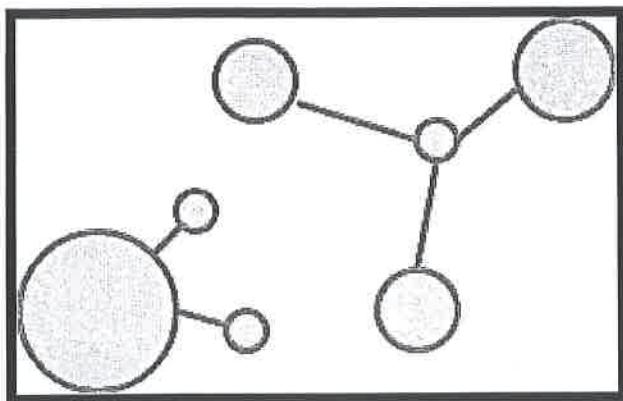
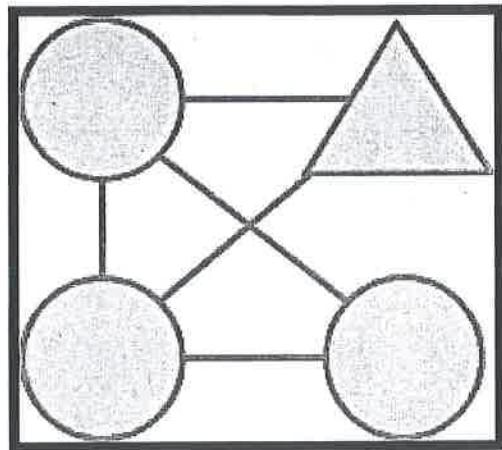
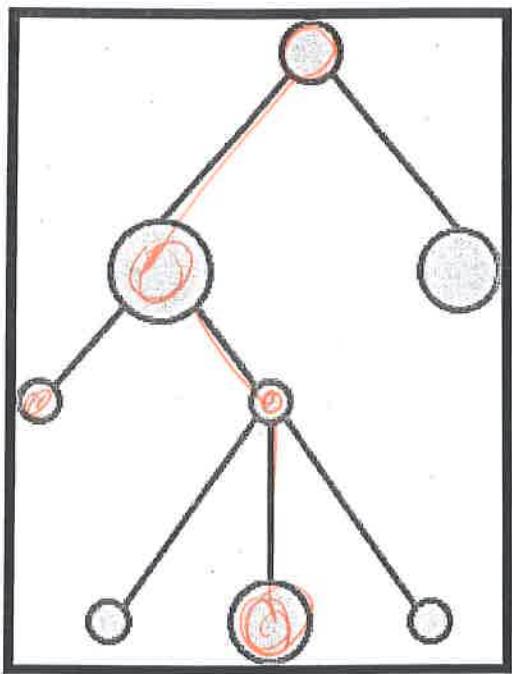


Harmony
Volume
Duration
Rhythm

Node shapes

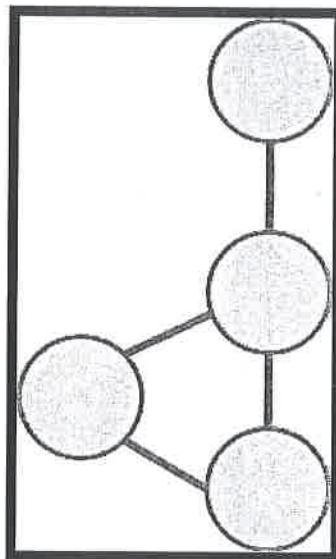
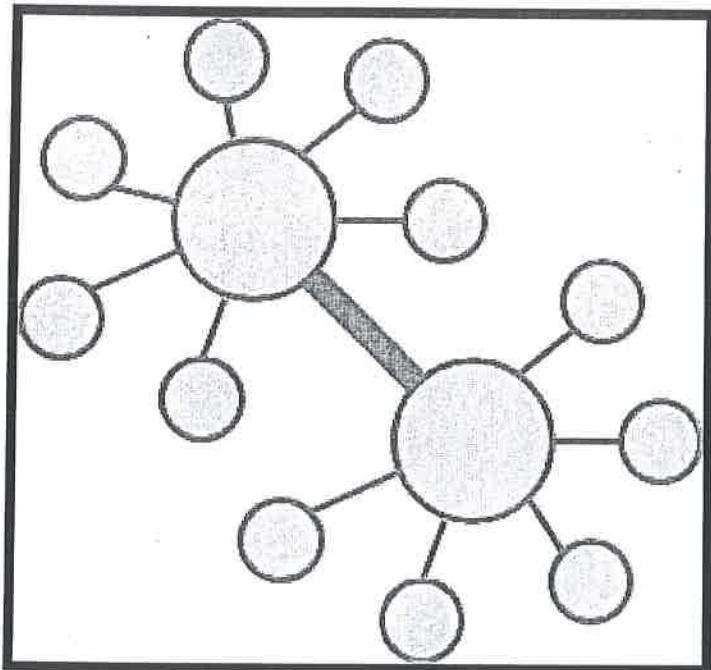
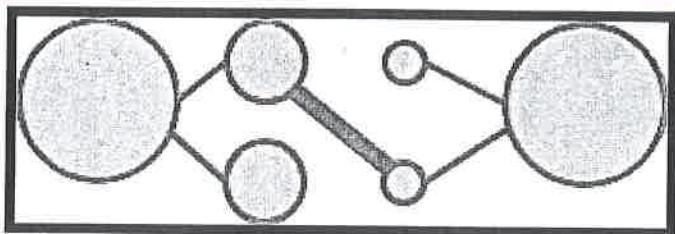


Timbre because it's like the different types of the pitches



Please justify your choice:

The first was like a timeline of the notes with the larger notes representing the more present sounds and the multiple branches being like different keys in one chord.



Please justify your choice:

The first is like the sounds are moving from left to right. The thick connection is like the change in pitch from the start to the end of the sound piece. The size of the nodes also are like the volume of the sounds.

What is your major?

Computer Science: Computer Game Design

What is your gender?

Female

Before this exercise how familiar were you with the features of networks?

Very familiar

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

I sang in a harmonizer group for a couple years in elementary school and tried to play piano for a few months in high school.

What genres of music do you listen to?

Alternative pop, indie rock, musicals, rap, r&b

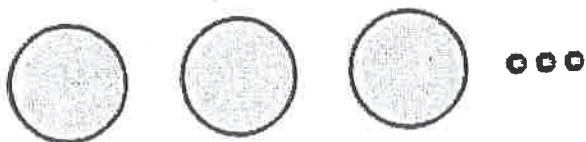
Do you often hum or sing to yourself?

Of course.

Name 3 networks that you are most often in contact with.

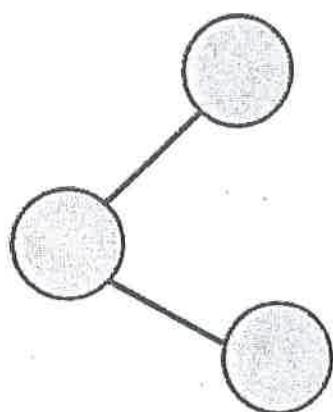
YouTube, school, & Instagram

Number of nodes



Rhythm
Cannot ~~make~~ form a ~~rhythm~~ rhythm
without a sufficient # of nodes.

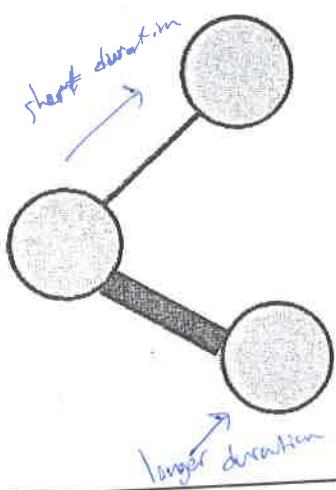
How nodes are connected



Melody

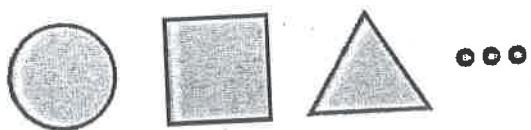
Stringing nodes ~~together~~ together to make
a melody of sound.

Strength of node connections

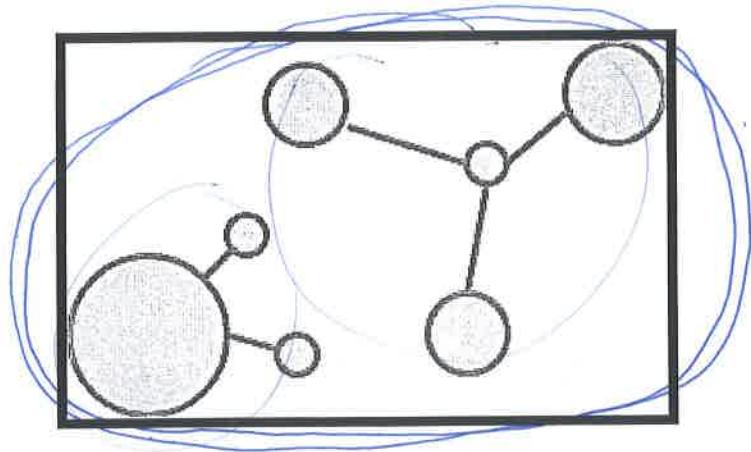
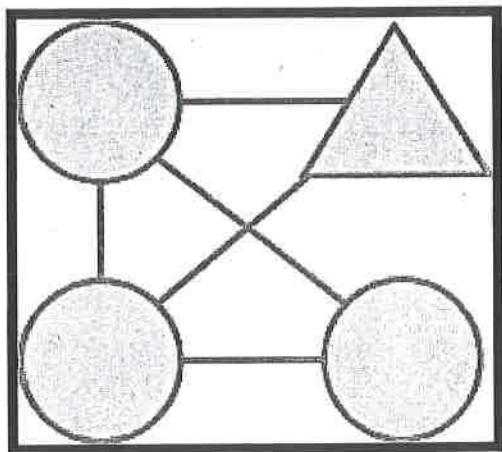
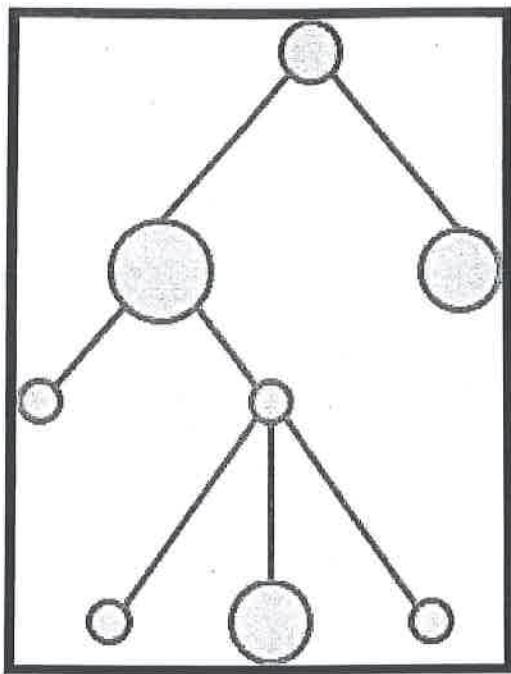


Duration
Stronger connection means that
the duration of that node to the
connecting one is longer

Node shapes

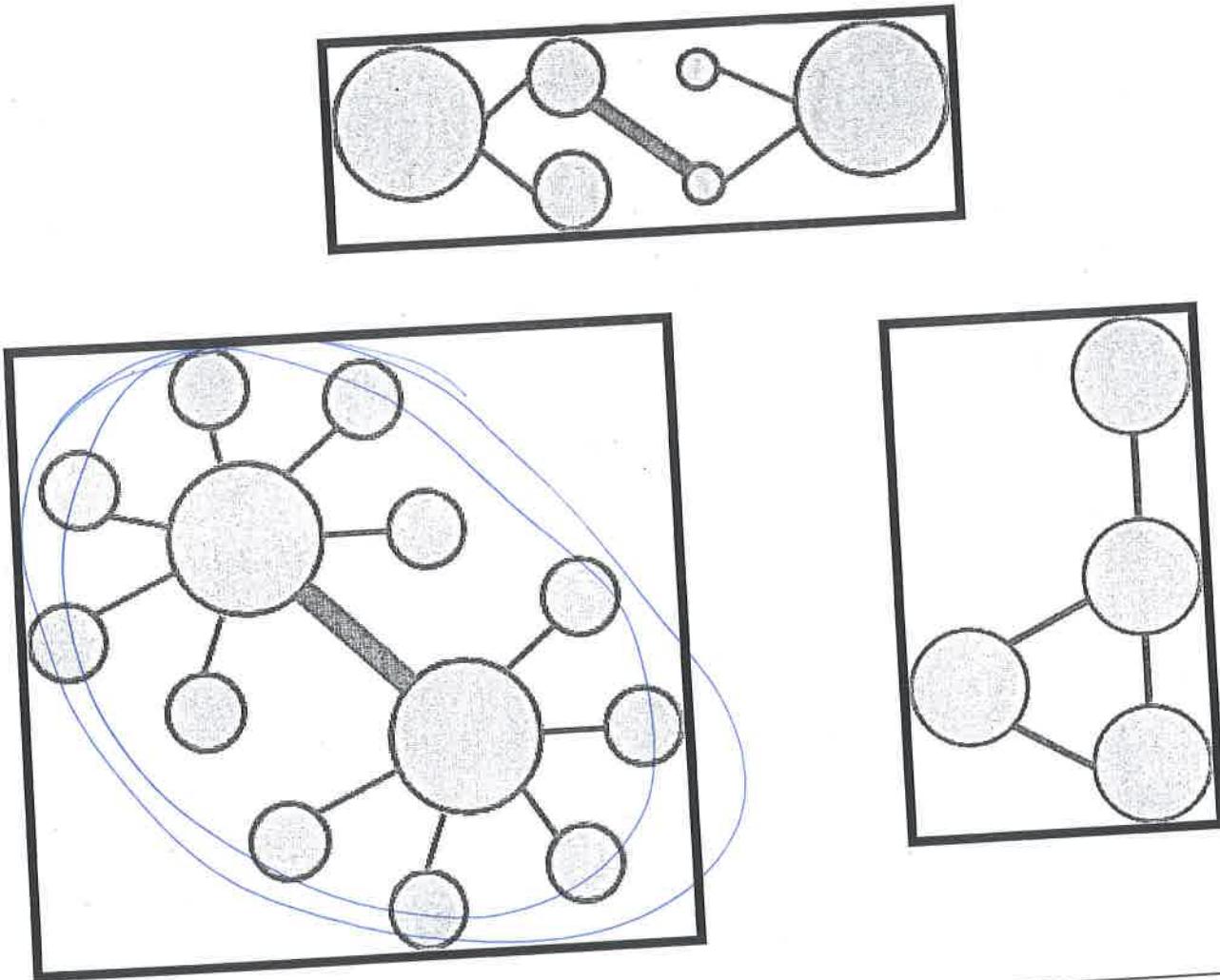


Timbre
different shapes, different feel
of the sound.



Please justify your choice:

The harmony makes it seem like there needs to be separate graphs for the different pitches. Like a piano player's hands, 2 different places = 2 different graphs.



Please justify your choice:

The rippling of sound "caused" by its preceding note led me to this choice. The ringing sound has many notes and it needs to be represented by a lot of nodes.

What is your major?

Technology and Information Management

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?
not familiar

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

In elementary school, I played the clarinet, trombone,
and piano.

What genres of music do you listen to?

I listen to many types: Hip hop, R&B, rock, Jazz, pop, funk, soul,

Do you often hum or sing to yourself?

yes

Name 3 networks that you are most often in contact with.

Social Networks

bus network

cell phone network

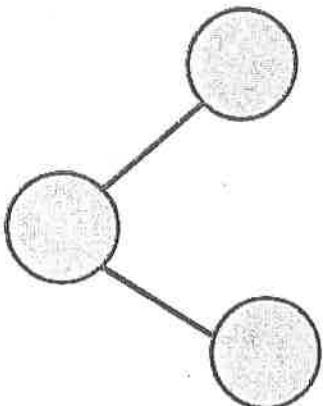
Number of nodes



...

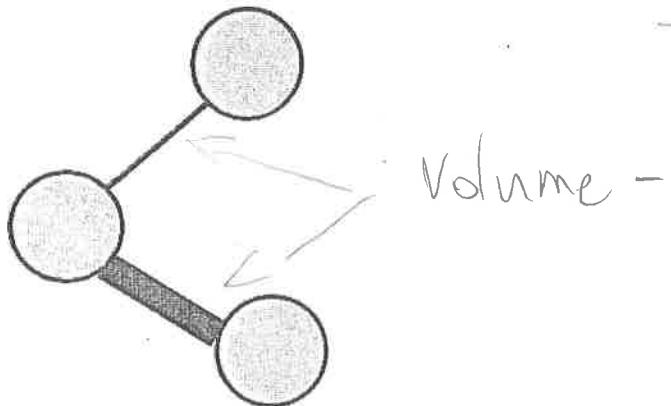
pitch - The circles make me think of different pitches or notes

How nodes are connected



Melody - The shifting position reminds me of changing pitch in a melody

Strength of node connections



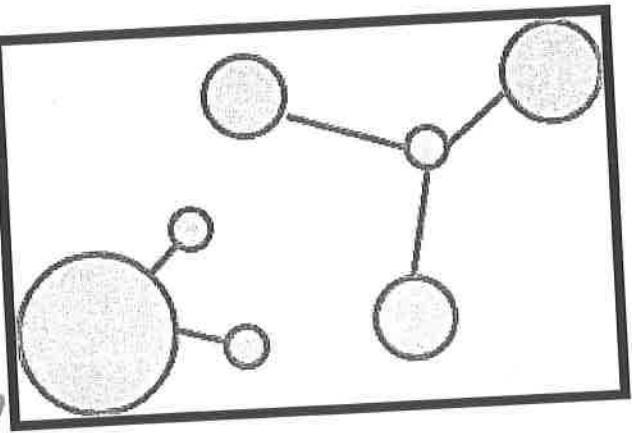
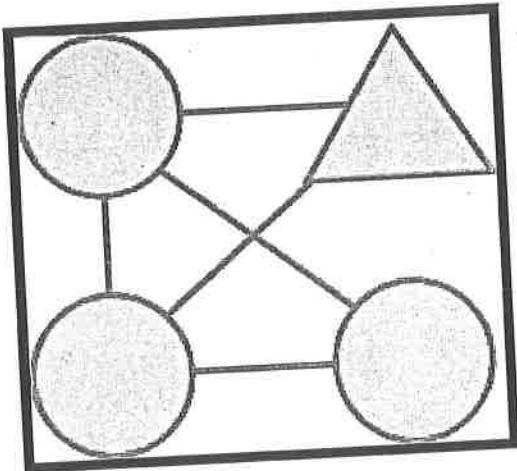
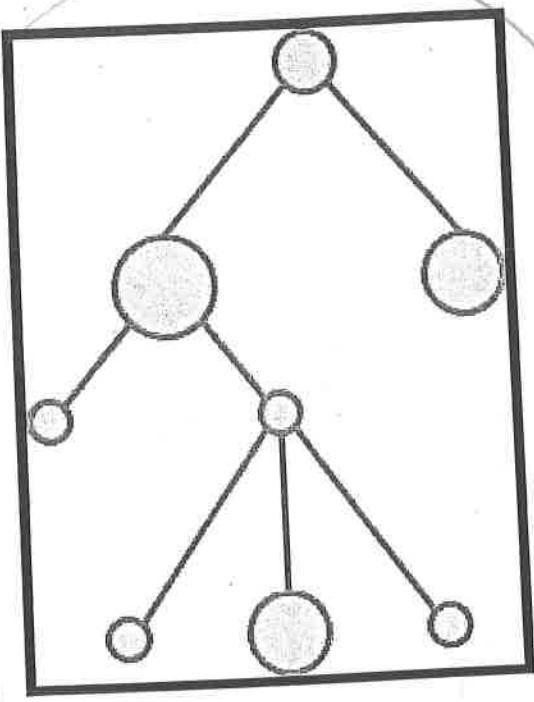
Thicker lines remind me of louder volumes

Node shapes



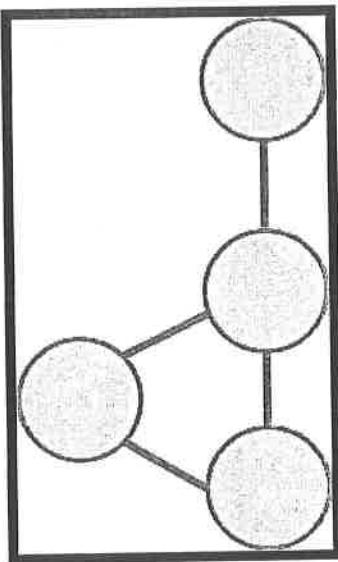
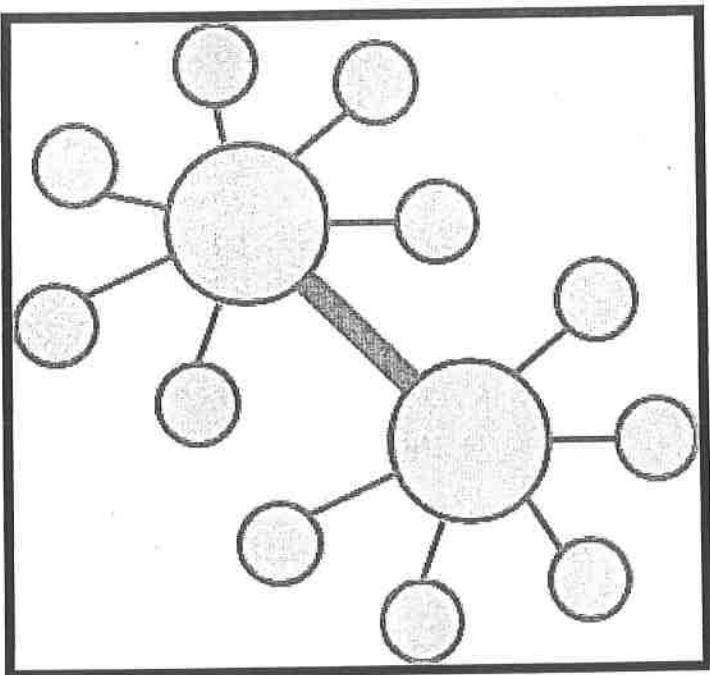
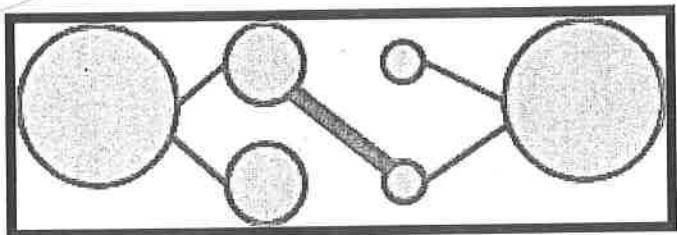
...

Timbre - different shapes remind me of different types of sounds



Please justify your choice:

The way the graph begins at the top wth a single circle and cascades downward becoming more complex (chords) makes me think of this chart. I can also see this one working too.



Please justify your choice:

This graph connects in a linear style that makes me feel like it works best here. The other graphs seem too simple and organized.

What is your major?

Art and Design in Games and Playable Media

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

I took data structures

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

I played trumpet for 1 year and play piano still
5th grade (since 7th grade)

What genres of music do you listen to?

Rock, Lofi, Orchestra, electronic, soundtrack

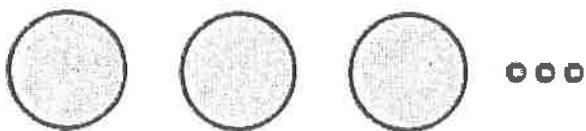
Do you often hum or sing to yourself?

Yes, but only when I'm alone.

Name 3 networks that you are most often in contact with.

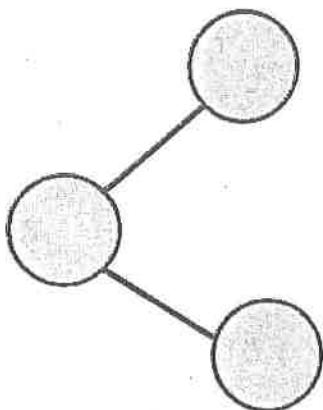
Social media, Art/Illustration, Game development

Number of nodes



They share the same shape, but vary in size & spacing, which is similar to writing notes/music for drums

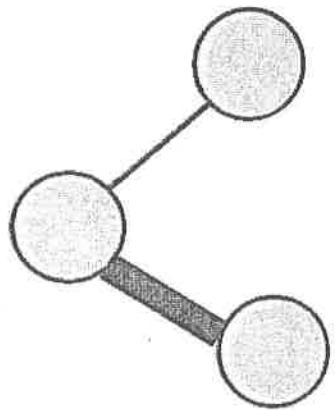
How nodes are connected



~~melody & harmony~~
The nodes begin as one from simultaneous split off - in the same way, music can change & converge

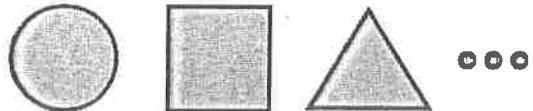
As the lines can vary in length they can indicate how long a previous note is played

Strength of node connections

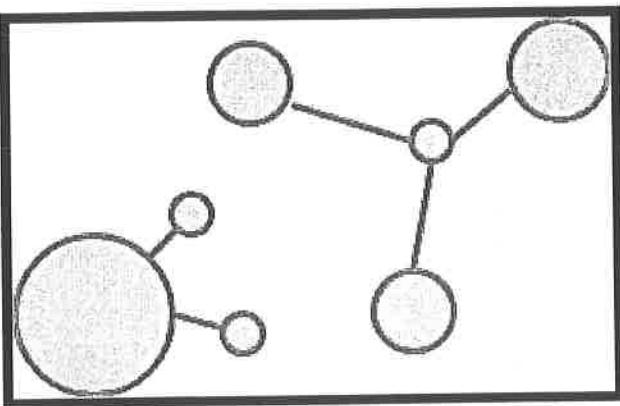
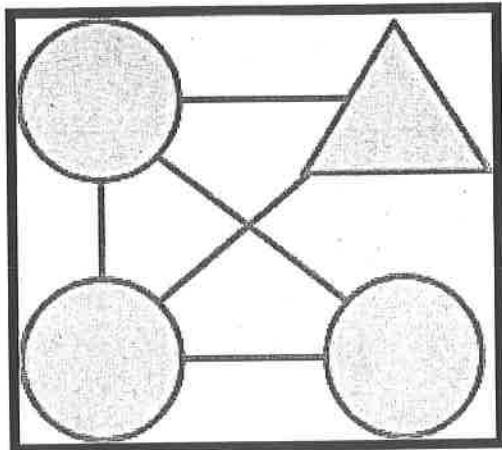
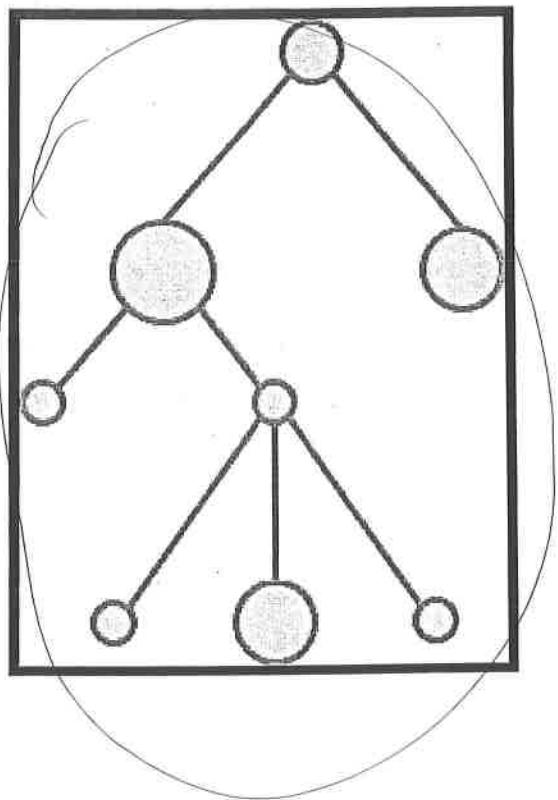


The thicker the line, the louder the music

Node shapes

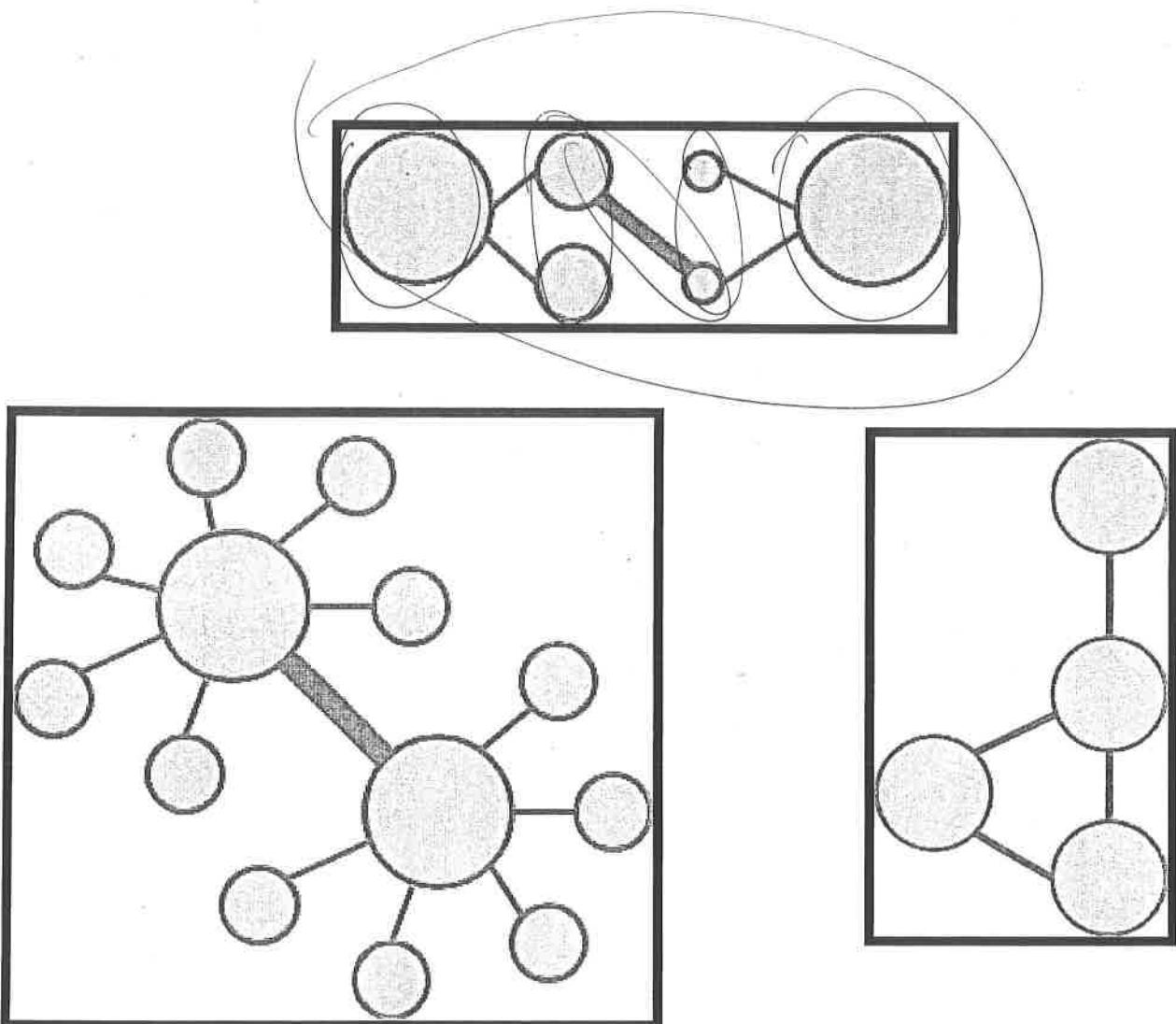


The shapes, sizes are different, similar to varying instruments and volumes it is played at



Please justify your choice:

The beginning sounds like a harmony which ~~too~~ is held out, then ~~comes~~ changes to one note, converging again to 2 notes, and finally playing a single note. The flow of the dots and the length of the lines seems to match the music (progressing from bottom to top)



Please justify your choice:

The first and last notes are held the longest, while the smaller dots seem to parallel each other, indicating they are stacked with each other in harmony.

What is your major?

Art & Design; Games and Playable Media (Game Design)

What is your gender?

Female

Before this exercise how familiar were you with the features of networks?

Not really ~~familiar~~ familiar

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Flute: 4th grade - now

I sing for fun

What genres of music do you listen to?

Christian music, hip hop/rap, instrumental, Korean music

Do you often hum or sing to yourself?

Yes

Name 3 networks that you are most often in contact with.

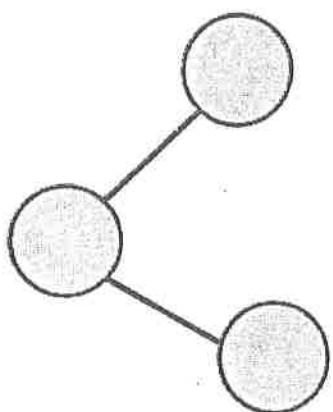
~~network~~ social (church, friends), bus network, social media network

Number of nodes



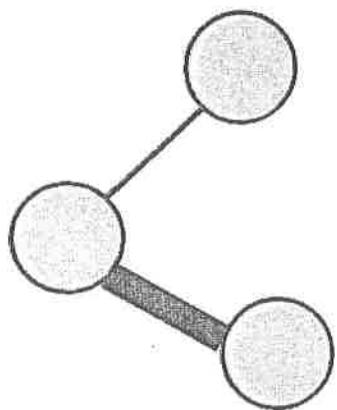
... Rhythm bc there are evenly spaced notes

How nodes are connected



Timbre bc the two holes are sympathetic, but just off in different directions.

Strength of node connections



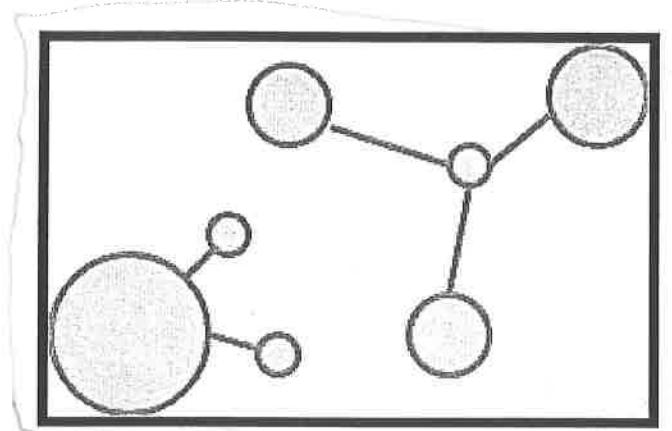
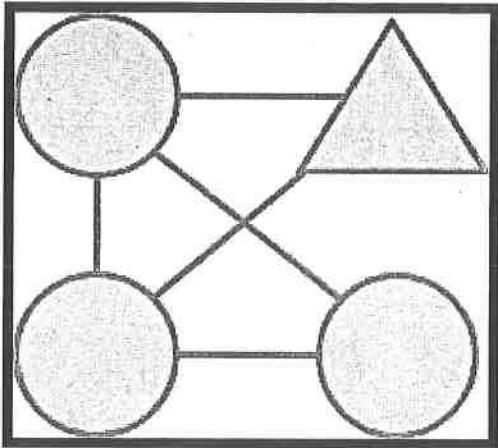
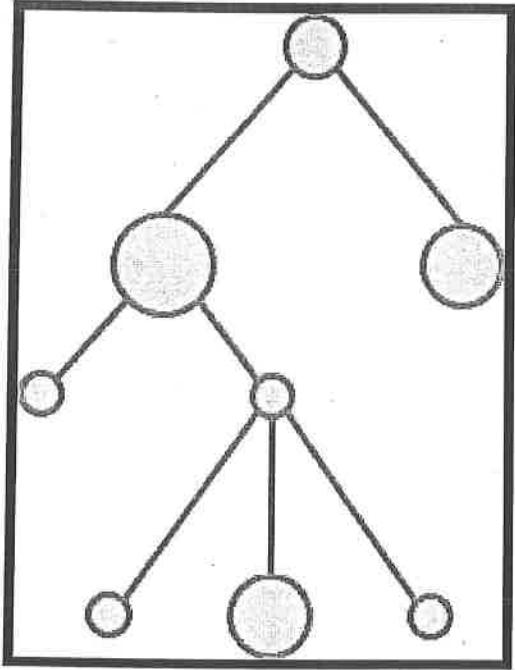
Harmony bc there are overlapping paths that are different. By overlapping, I mean a vertical line would touch them both.

Node shapes

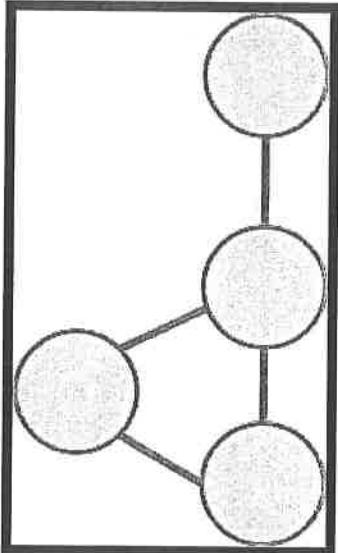
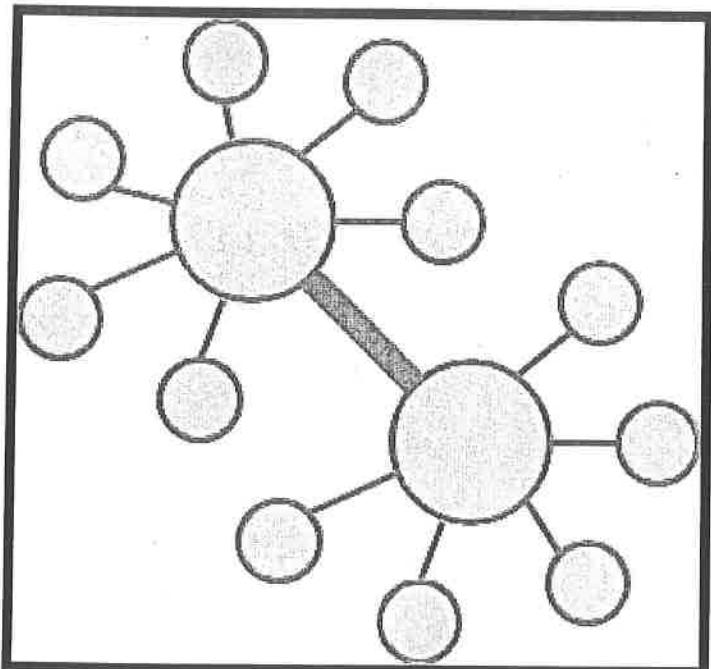
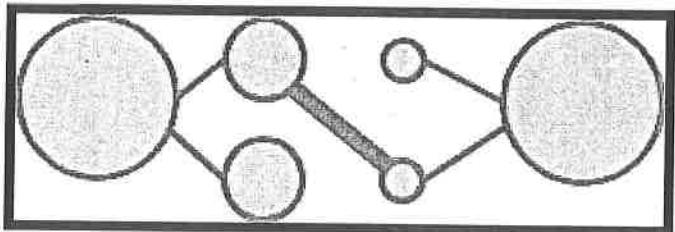


...

Melody bc it's built from a combination of different parts



This clip felt like it contained 2 separate parts ^{with notes} listed
 the longest at the start and the end. The picture has 2 parts and, when
Please justify your choice: viewed left to right, has larger circles at the start & end



Please justify your choice: I chose this one bc it felt like there was a "main part" to the song with two smaller parts in the background, which I feel the picture represents.

What is your major?

ASPM

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

Somewhat, I took data structures & other classes have touched on it.

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Nop, 0 musical talent.

What genres of music do you listen to?

Rock & Roll or instrumental soundtracks mostly.

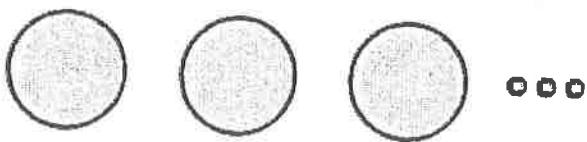
Do you often hum or sing to yourself?

Yeah.

Name 3 networks that you are most often in contact with.

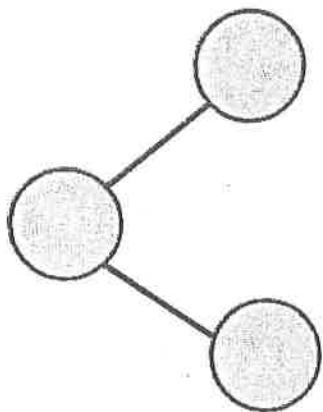
- Bus routes
- Game systems
- Discord

Number of nodes



RHYTHM
Beatlike design.

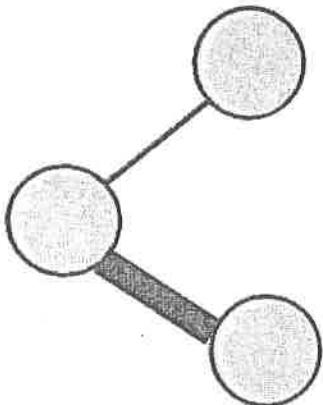
How nodes are connected



Melody

One note connected to another

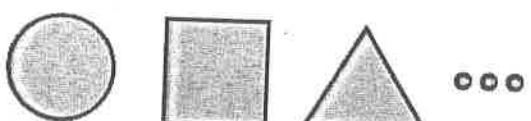
Strength of node connections



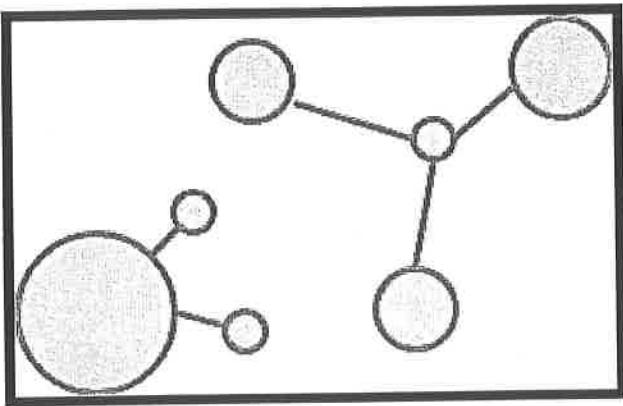
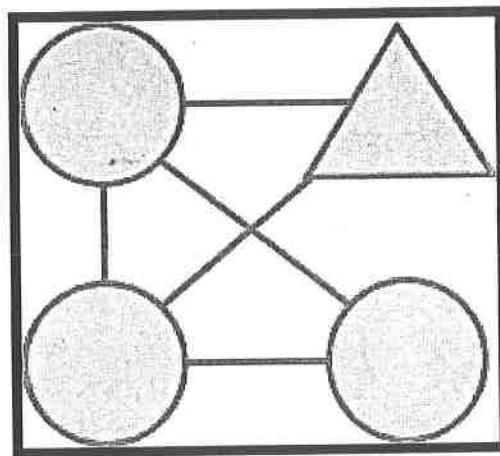
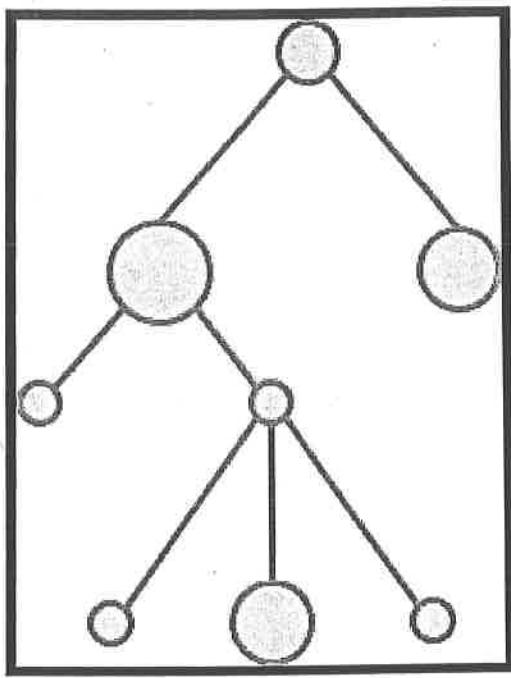
Volume

Bolded line vs thin line
distinguish the strength between
notes played to the next

Node shapes

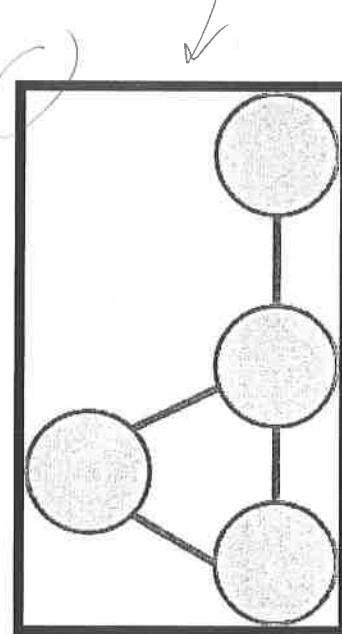
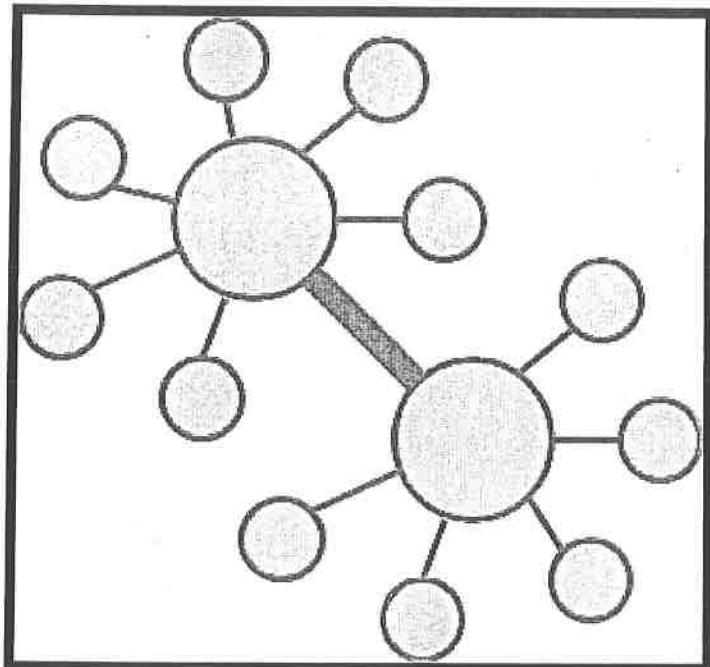
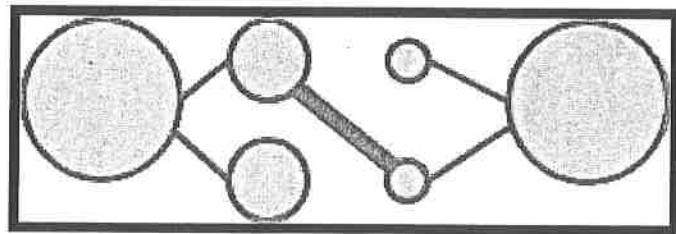


timbre
different types of ~~design~~ for different
timbres of ~~the~~ sound.



Please justify your choice:

The music is jumping from only a couple pitches and going back to them. I think I only hear one change in time hence the triangle.



Please justify your choice:

Moving from top down when the sound hits the middle note
I feel like it meets at the other points after. They don't
really harmonize on ~~get back~~ loop back into the middle note
but simply for the parting of sound I feel that this choice
is most accurate.

What is your major?

Arts Games and Playable Media

What is your gender?

Attack Helicopter

Before this exercise how familiar were you with the features of networks?

Pretty familiar

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Yes, bass, Alto sax, Violin
4 yrs 4 yrs 5 yrs

What genres of music do you listen to?

Rock, modern rock
Hip Hop

Do you often hum or sing to yourself?

Yes

Name 3 networks that you are most often in contact with.

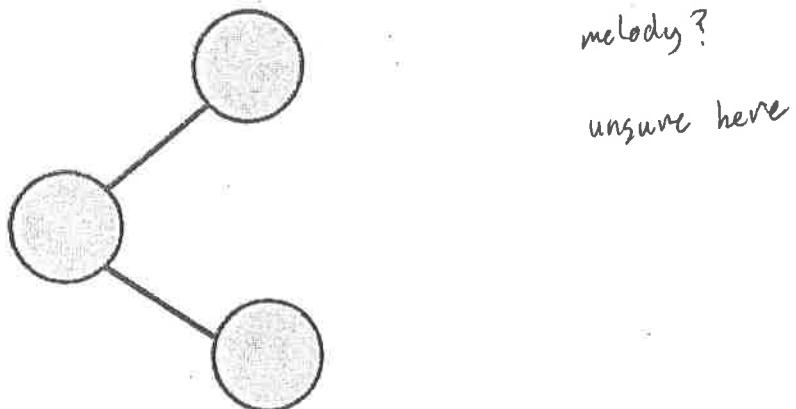
Social Network,
Bus and transportation

Forums.

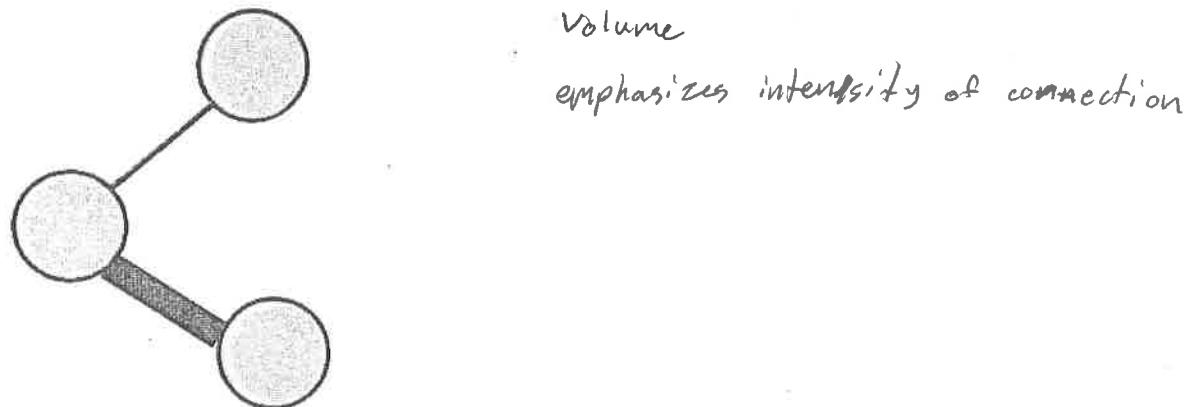
Number of nodes



How nodes are connected

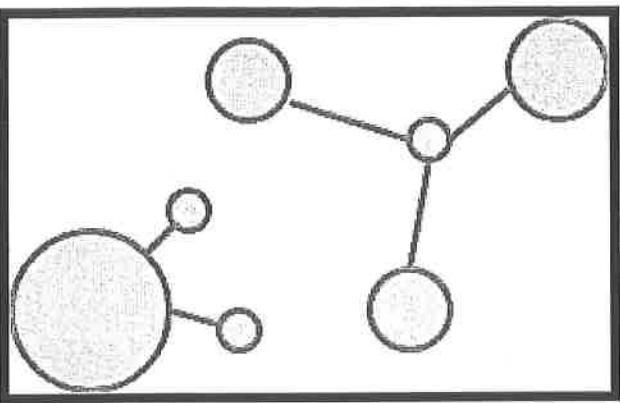
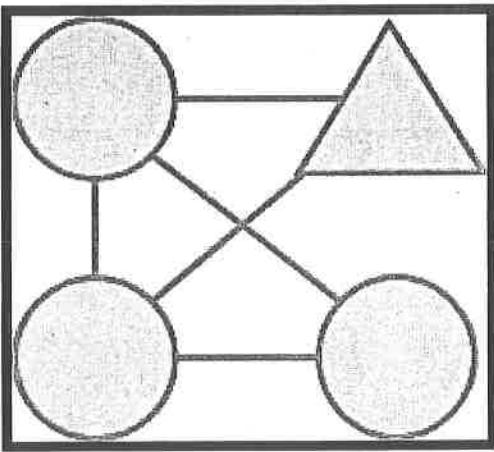
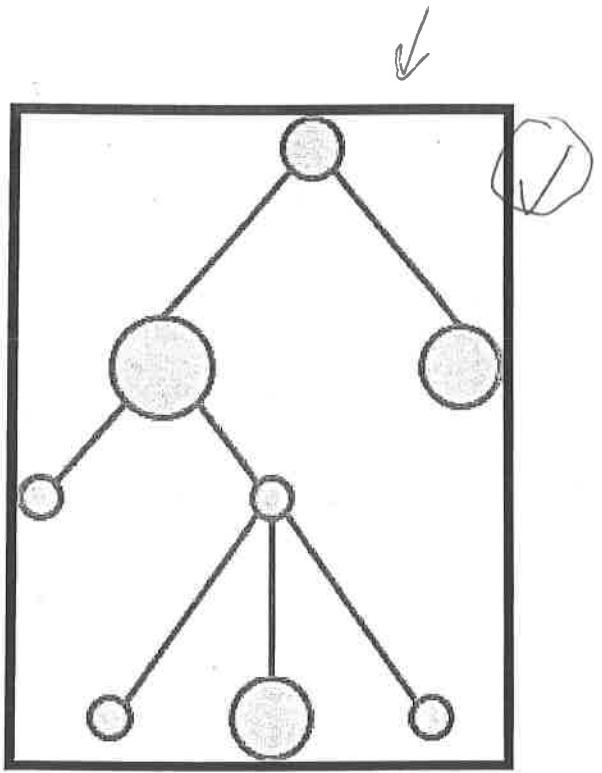


Strength of node connections



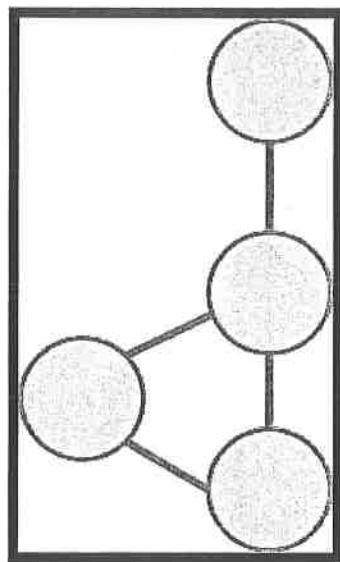
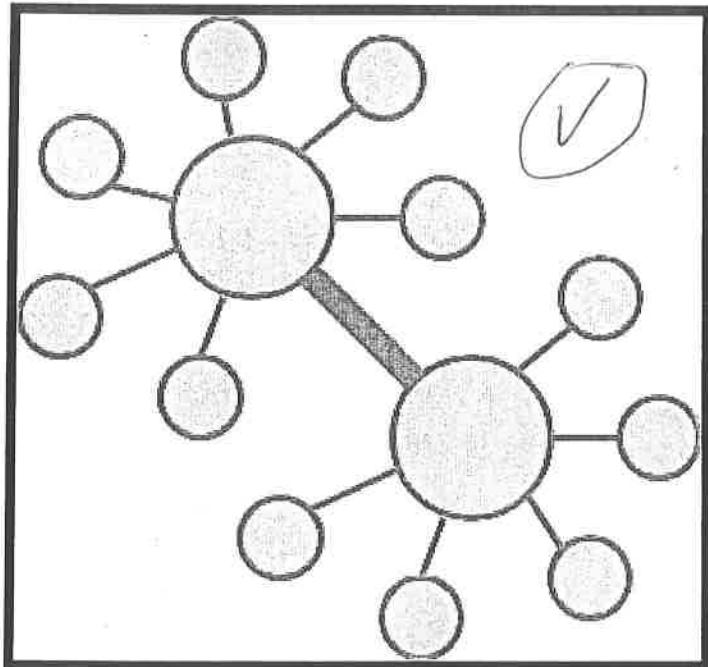
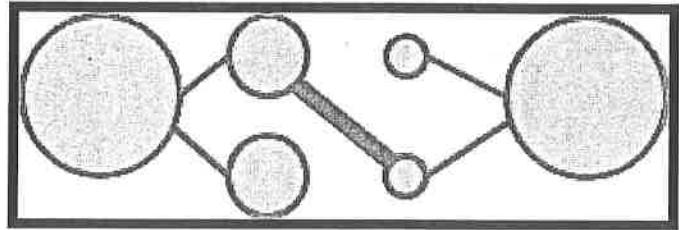
Node shapes





Please justify your choice:

~~Stems-like~~ feels like a cascading of minor differences
that has repeats that would depict the
pattern in the chosen graph



Please justify your choice:

feels radial with echoing sounds representing the
many smaller nodes of the graph
child

What is your major?

Computer science: Game Design

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

Moderately

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

No.

What genres of music do you listen to?

I don't listen much, but I'm interest in most music genres

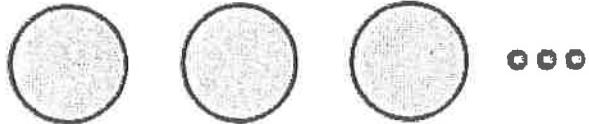
Do you often hum or sing to yourself?

occasionally, not often though

Name 3 networks that you are most often in contact with.

Bus routes mostly

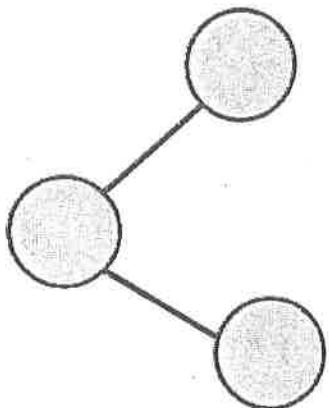
Number of nodes



...

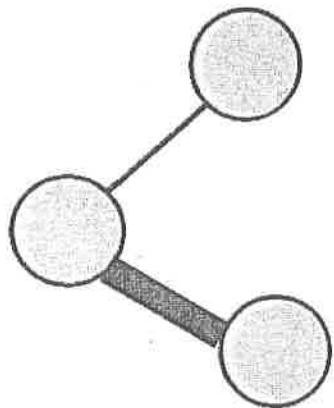
duration, more nodes = notes

How nodes are connected



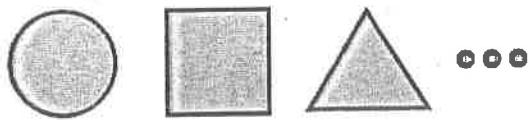
melody, connection between notes

Strength of node connections

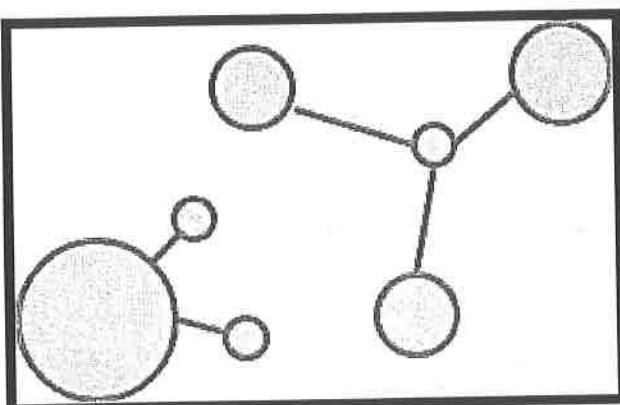
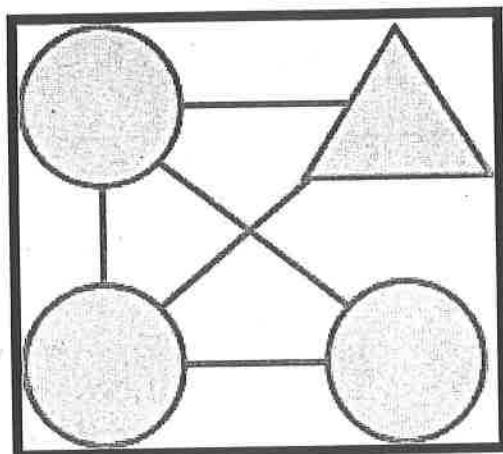
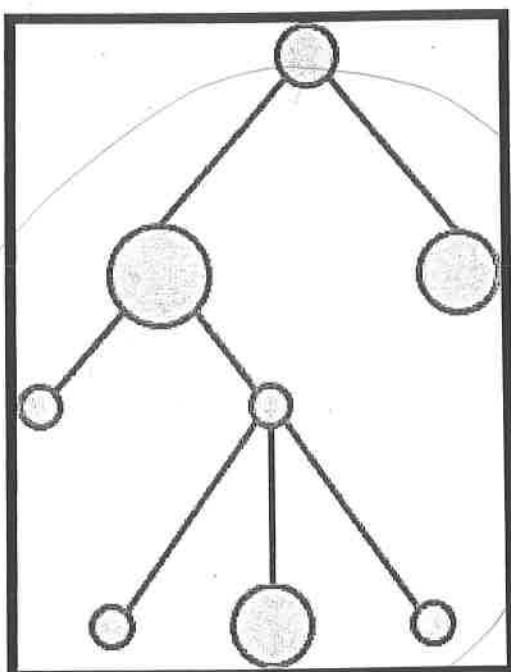


volume, strength of connection means it
is louder

Node shapes

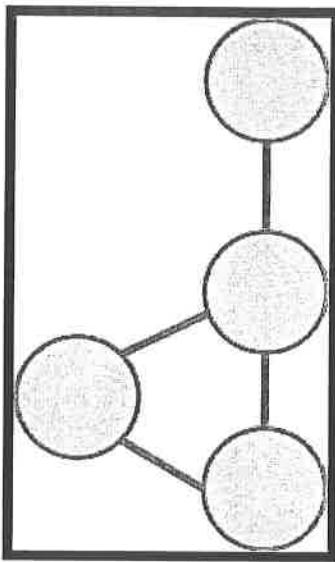
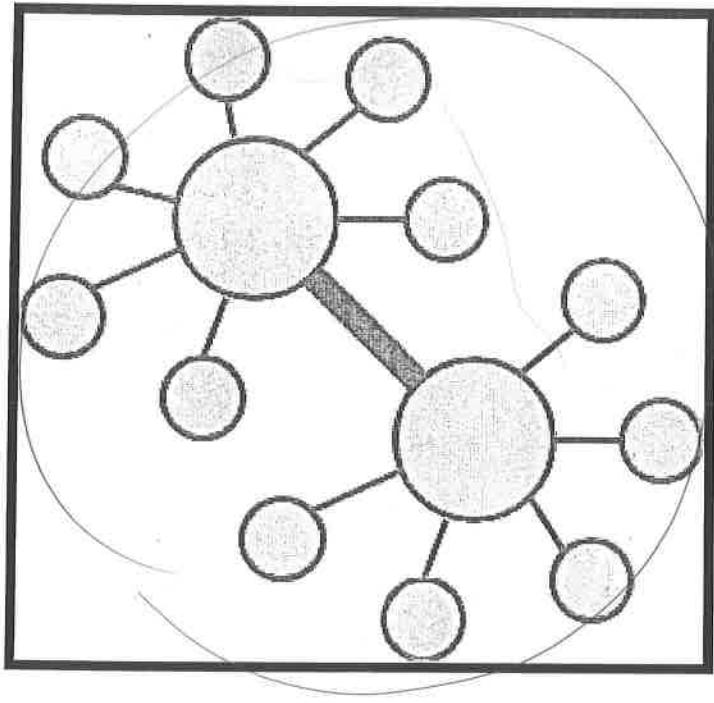
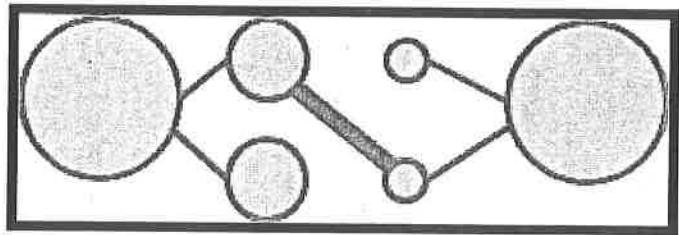


timbre, different shapes =
different instruments



Please justify your choice:

~~The notes~~ There was some harmony, so I think that the nodes branching off mean that there are nodes playing @ the same time.



Please justify your choice:

Like the last one, I hear other sounds in the background
so the connecting nodes are playing at once
I think

What is your major?

AGM (Art & Design: Games and Playable Media)

What is your gender?

Female

Before this exercise how familiar were you with the features of networks?

Eh

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Nope

What genres of music do you listen to?

RnB, Hip hop

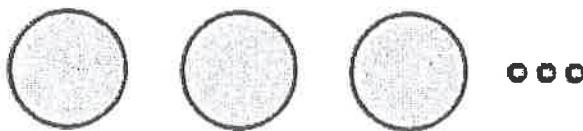
Do you often hum or sing to yourself?

Yes

Name 3 networks that you are most often in contact with.

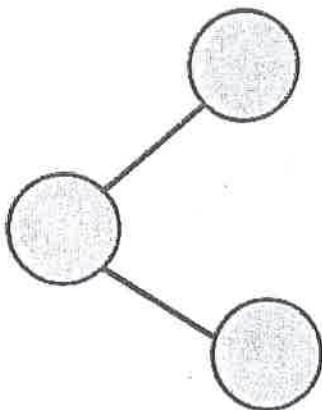
- social network
- buses
- walking paths?

Number of nodes



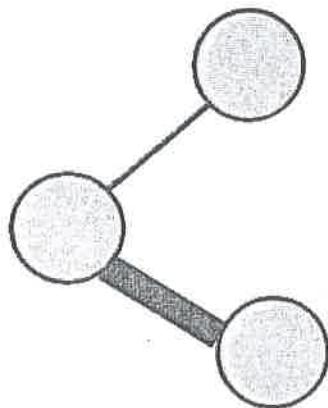
Melody: I think the number of notes in a melody would be easy to count, ideal for communicating a number

How nodes are connected



Harmony: A connection between two nodes could be the sound of both nodes played simultaneously

Strength of node connections

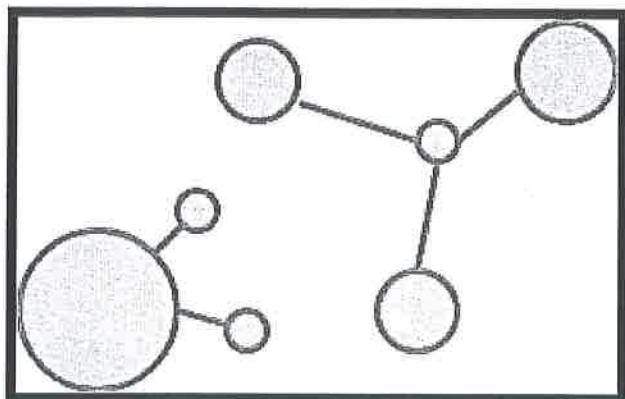
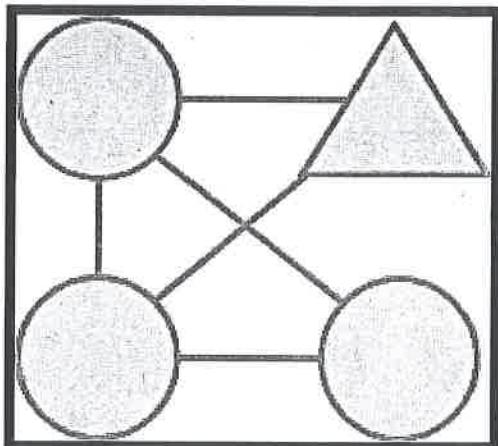
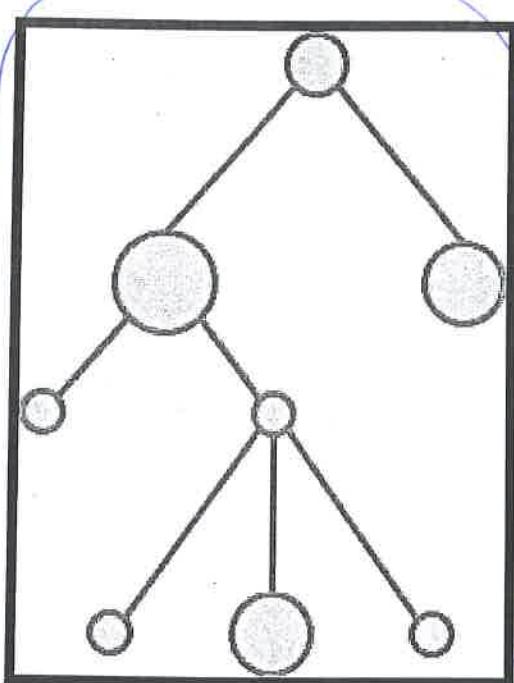


Volume: loudness and strength just seem to go hand in hand, the most important network connections should be the easiest to hear

Node shapes

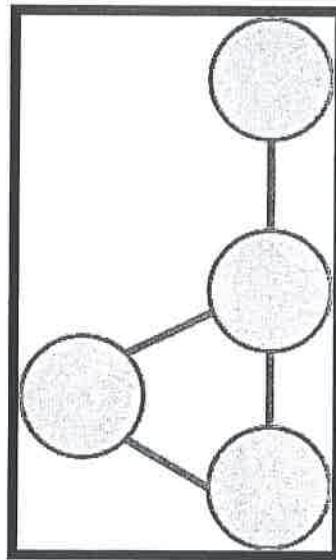
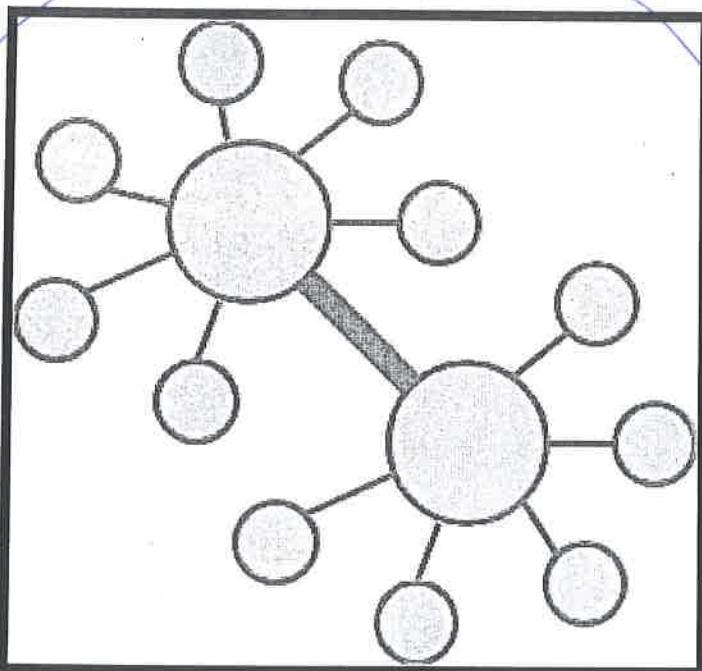
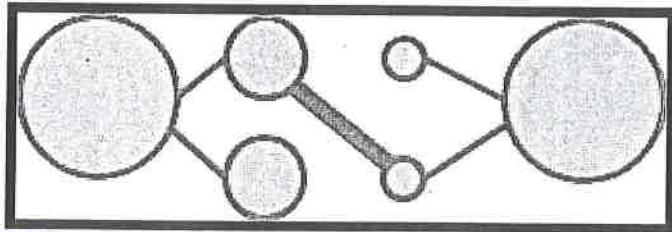


Timbre: Just because I don't think timbre can be easily ranked on a linear scale or quantified as easily as the other features, and shapes shouldn't be portrayed as higher or lower differing



Please justify your choice: from top to bottom

The number of ~~different~~^v layers is almost the same as the number of nodes, I could hear it as the top ~~one~~ node drawn out, then its 2 branches simultaneously, then the 2 branches on the left simultaneously, then the ~~one~~ bottom 3 simultaneously, with the big one in the middle ~~one~~ having a longer duration.



Please justify your choice:

I really wasn't sure but the ²/_v twinkling sounds seemed to match with the many equal notes coming out from the big 2. I couldn't really make sense of the 5 clear notes, ~~either~~ though

What is your major?

Cognitive Science

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

Not very familiar. I've learned a little about neural nets that this reminded me of

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

I briefly took drum & guitar lessons about 5 years ago

What genres of music do you listen to?

Indie, alternative

Do you often hum or sing to yourself?

Occasionally

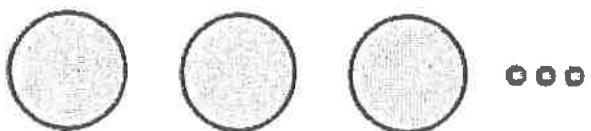
Name 3 networks that you are most often in contact with.

Neural nets in computer science

Social networks

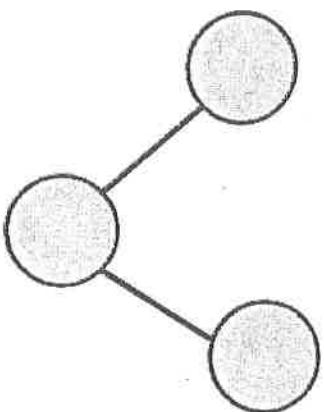
Models of language parsing & in the brain

Number of nodes



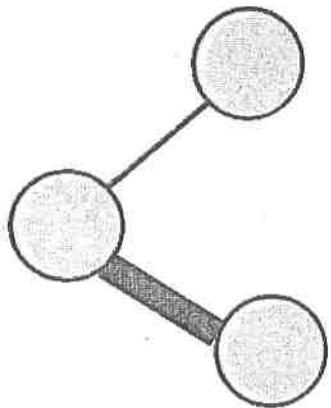
Pitch - the amount of notes w/ diff. pitches

How nodes are connected



Melody - the path of notes played linear

Strength of node connections

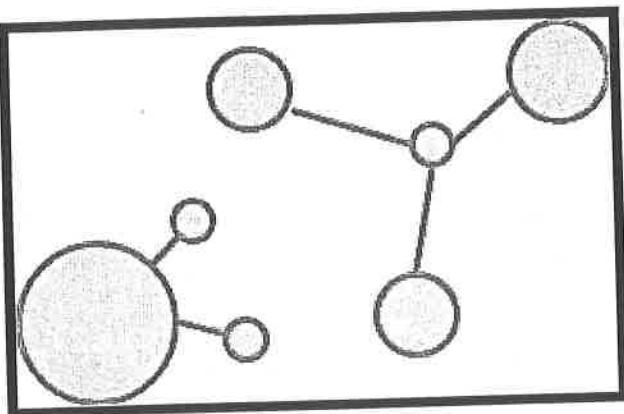
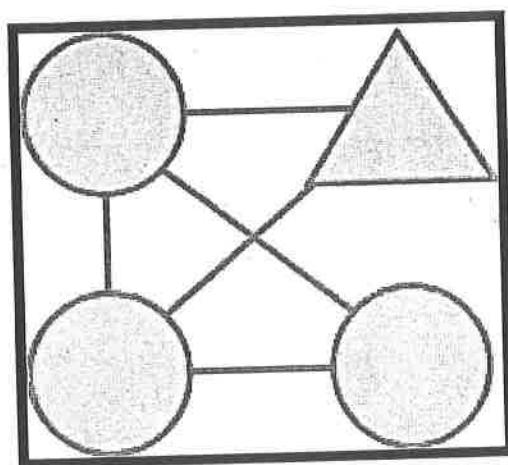
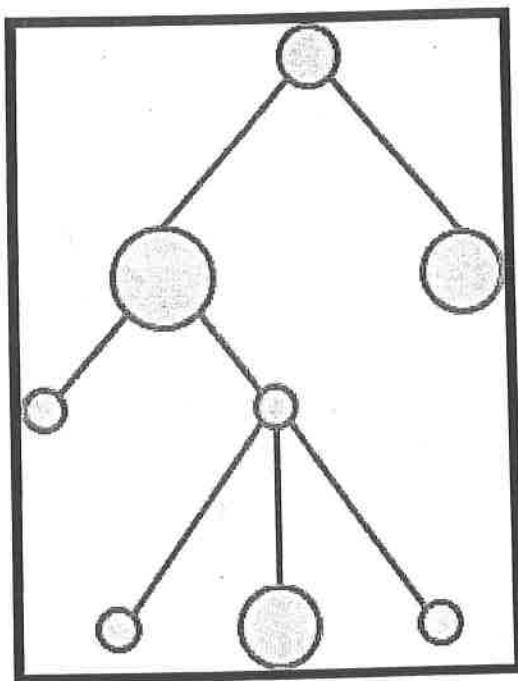


Harmony - which pitches are played at the same time

Node shapes

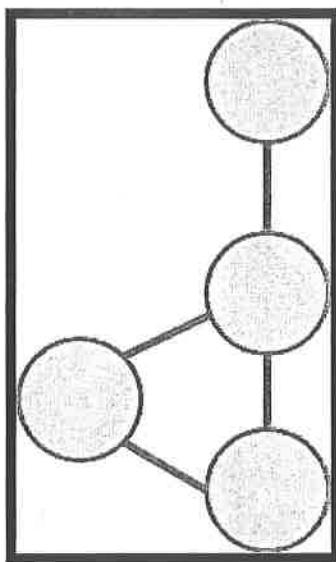
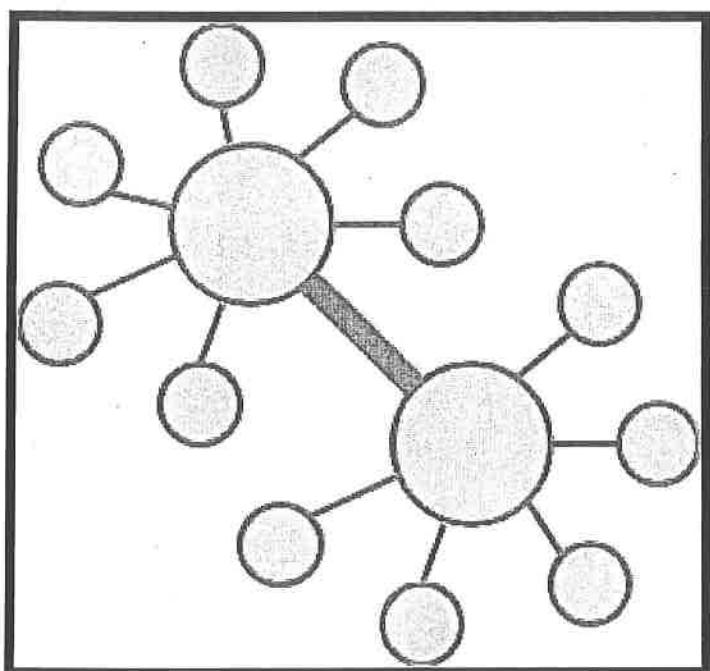
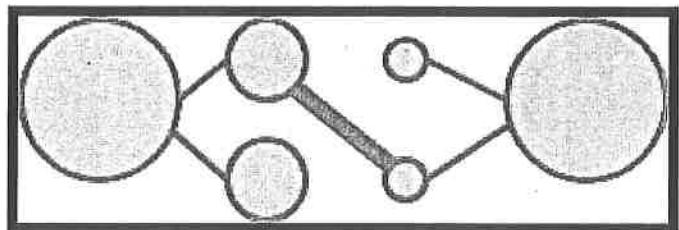


Timbre - different shapes resemble different "colored" instruments



Please justify your choice:

- smaller notes receive shorter duration
- two notes horizontal played at the same time



Please justify your choice:

- two notes held out at the end resemble the stronger connection
- more beginning note at a lower pitch, and the larger nodes

What is your major?

AGPM

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

Somewhat → Data Structures

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Guitar for 1 year, 4 years ago.

What genres of music do you listen to?

Rap, Indie hip hop

Do you often hum or sing to yourself?

Eh. Not much.

Name 3 networks that you are most often in contact with.

Discord, Gmail, Reddit

Number of nodes



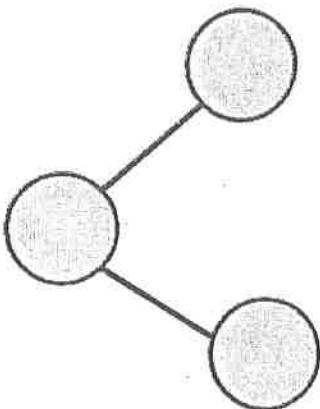
...

melody

rhythm

- each node is a note
 - each very regular rhythm
-

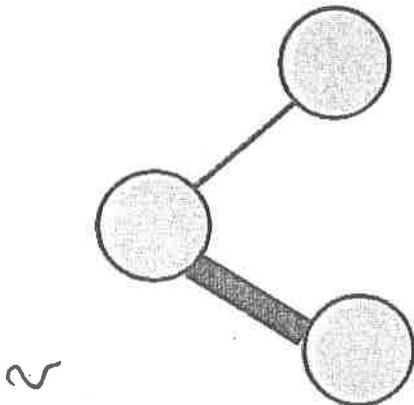
How nodes are connected



harmony

- three connected nodes played at the same time
-

Strength of node connections



timbre

- same notes, different colors
-

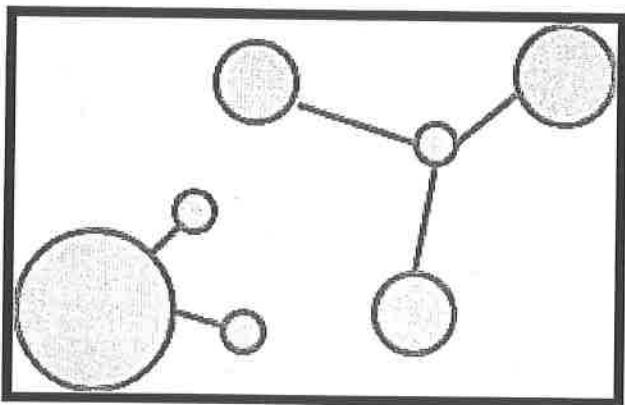
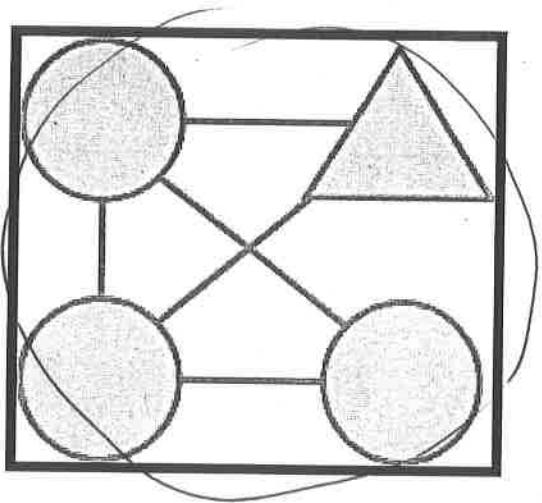
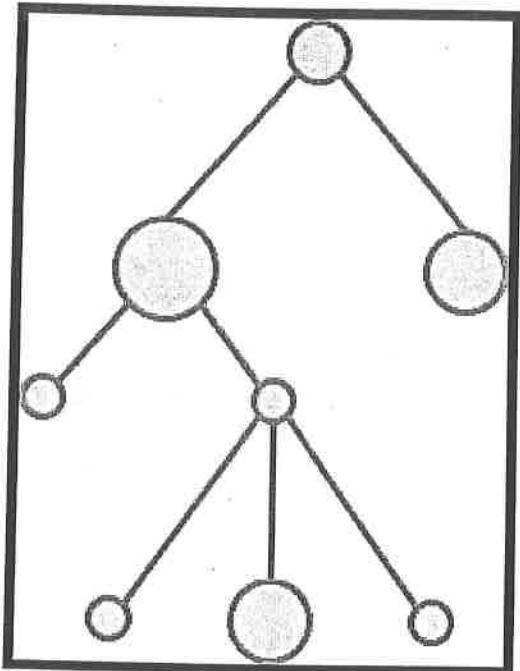
Node shapes



...

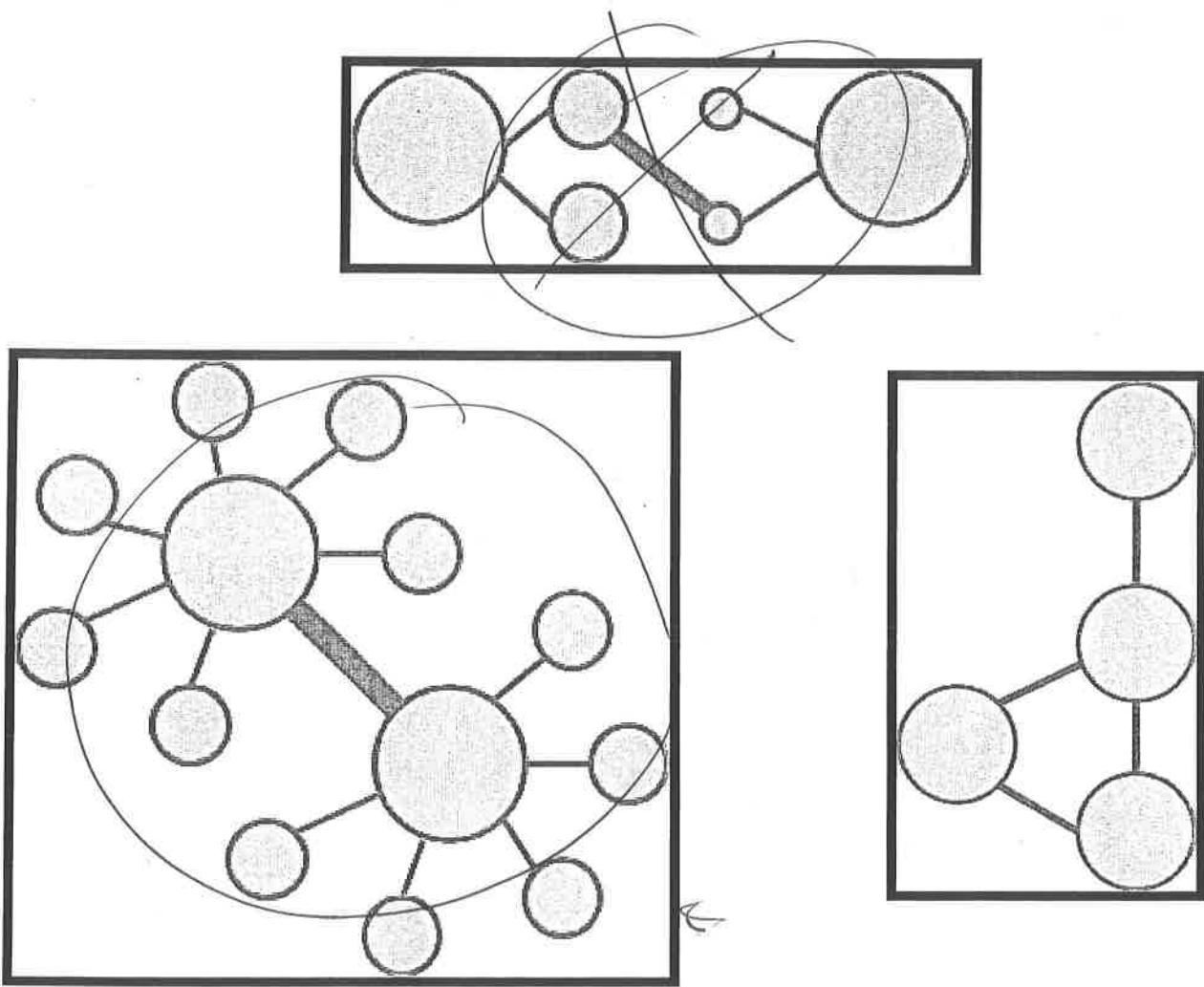
pitch

- different pitch different shape



Please justify your choice:

There were 5 notes played and this graph has the closest number of nodes. There are also 5 links in the graph, and if it was a directed graph, one link could represent one note.



Please justify your choice:

They look like those instruments that have beads attached to them and that bounce off the drum like centerpiece. They remind me of maracas. This, coupled by the plentiful, trailing, low volume notes made me choose this.

What is your major?

CS Game Design

What is your gender?

M

Before this exercise how familiar were you with the features of networks?

Very familiar

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

I'm learning the guitar and I sing in theater shows

What genres of music do you listen to?

Broadway, country, pop, EDM, techno, Jazz

Do you often hum or sing to yourself?

All the time

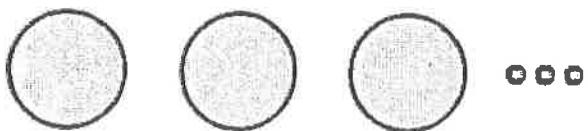
Name 3 networks that you are most often in contact with.

Snapchat (Friends)

Facebook

Instagram

Number of nodes

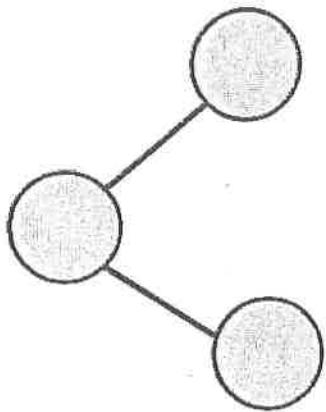


Volume

More nodes = Louder

Less = Quiet

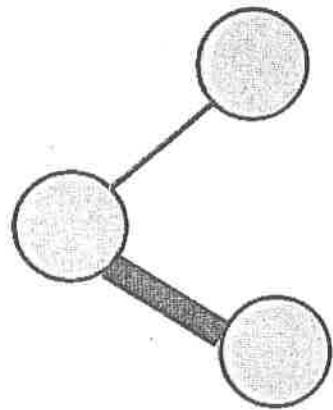
How nodes are connected



Melody

Connections between nodes give
a flow for what the pitch does
over time

Strength of node connections



Duration

Connection strength is how long the
note persists before the next

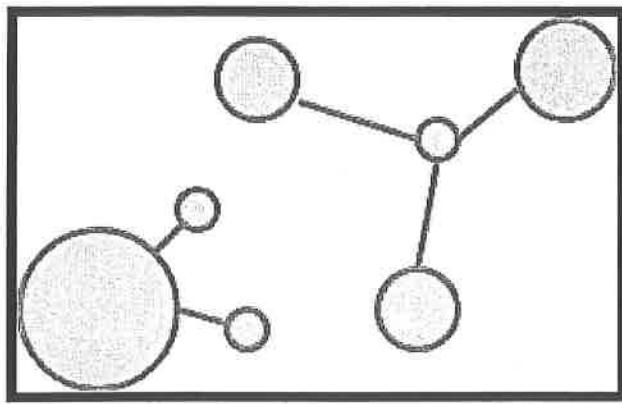
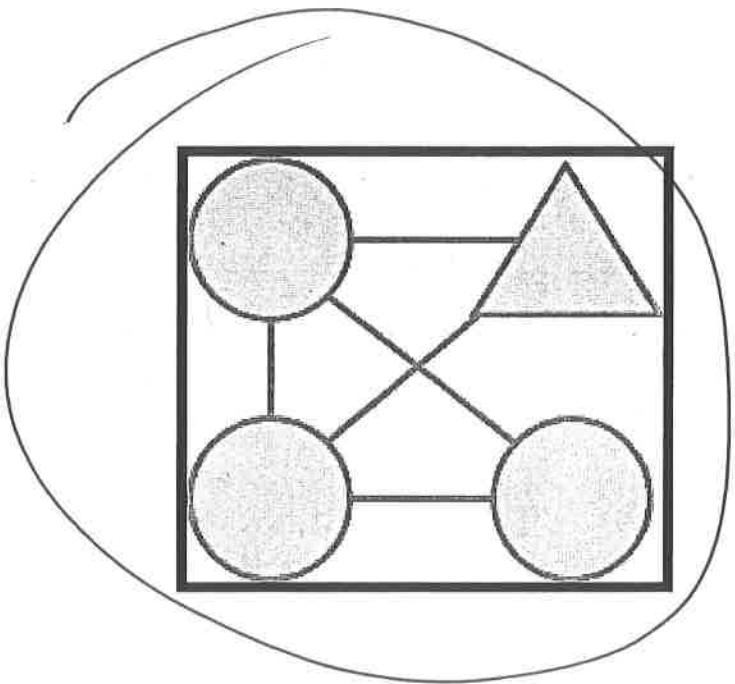
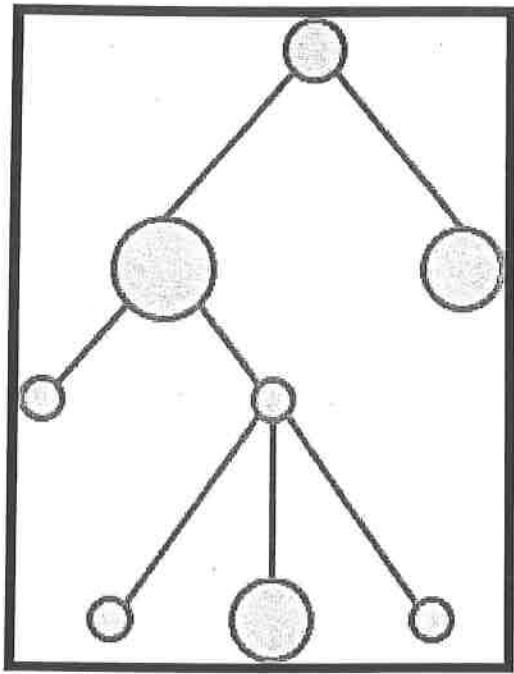
Node shapes



Timbre

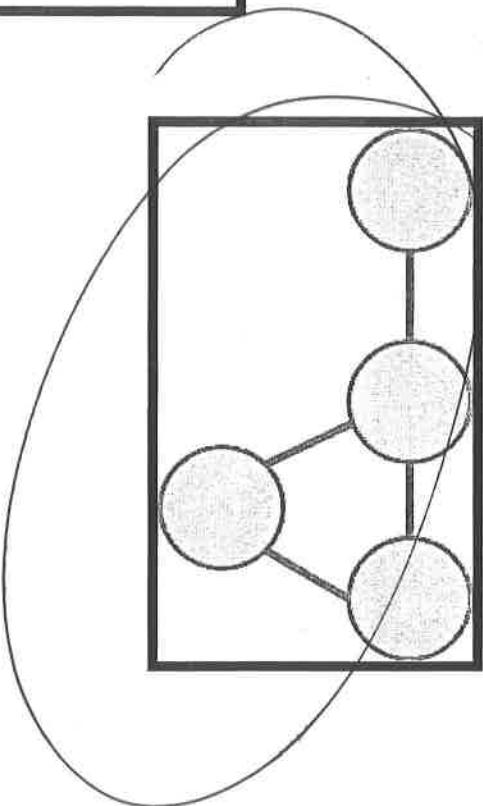
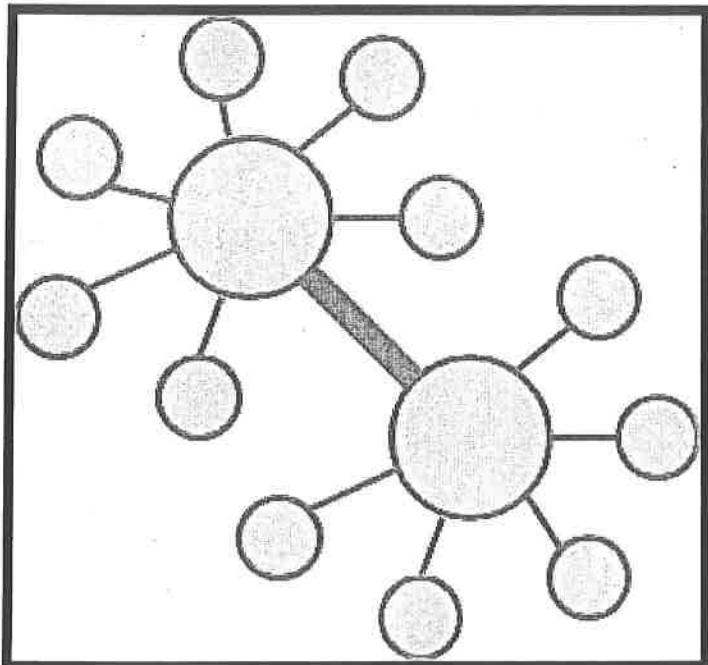
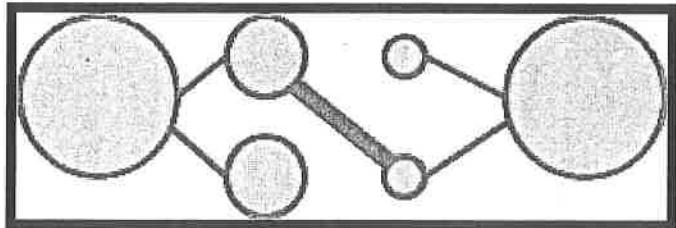
Different shape just makes me
think of different instruments.
Inherent difference.

~ I can also see
pitch with the
same argument,
more so Timbre



Please justify your choice:

The interconnection reminds me of the chords in the sound. The triangle is the different sound than the circles, ~~is~~ representative of how it plays by itself, and the circles are the chords,



Please justify your choice:

Going down, the first note is on the top, then the circular feeling of the (cluster) is going about the connections on the bottom repeatedly.

What is your major?

Computer Science: Game Design

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

I'm very familiar in programming contexts.

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Yes, I play piano, and used to play fiddle and trombone.

What genres of music do you listen to?

EDM, Hip Hop, Bluegrass, Jazz

Do you often hum or sing to yourself?

Yes

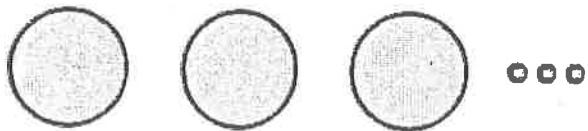
Name 3 networks that you are most often in contact with.

Programming graphs

friend networks

Bus transit networks

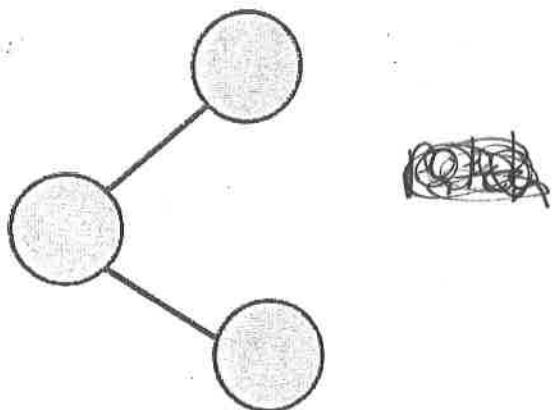
Number of nodes



~~Rhythm~~ Harmony

The number of notes in the harmony denotes # of nodes

How nodes are connected

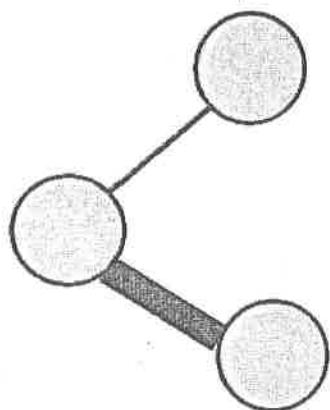


~~Rhythm~~ Harmony denote different structures

Rhythm: different Rhythms



Strength of node connections

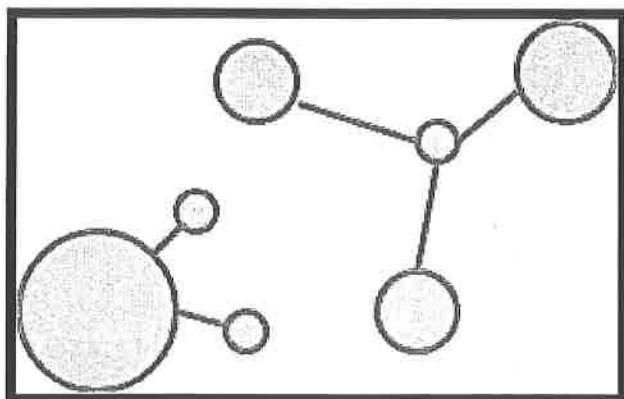
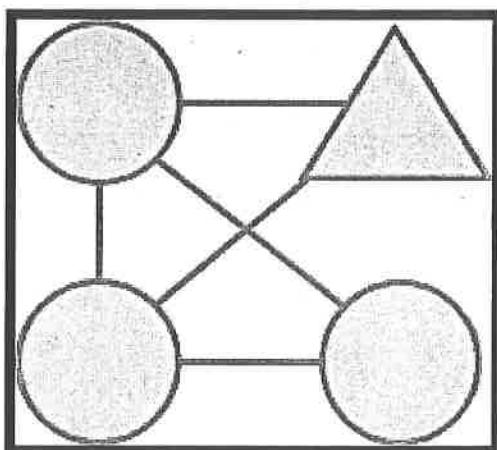
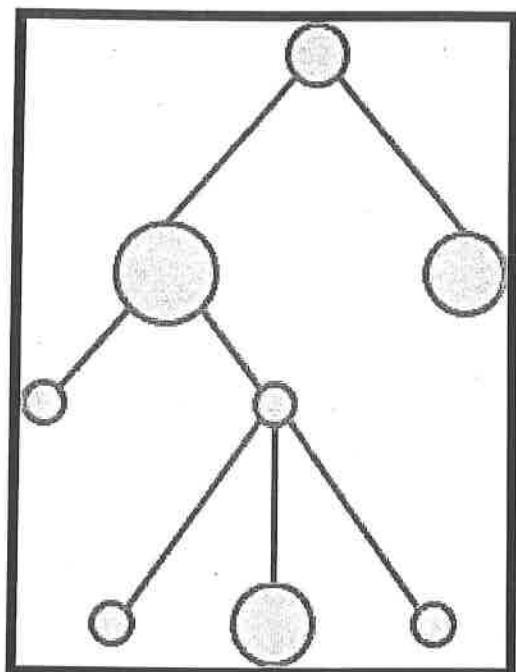


Volume : continuously variable, maps well to size

Node shapes

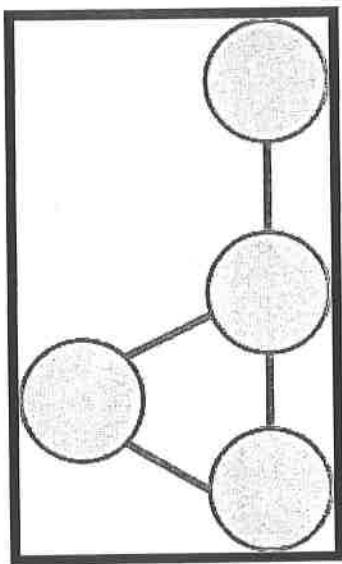
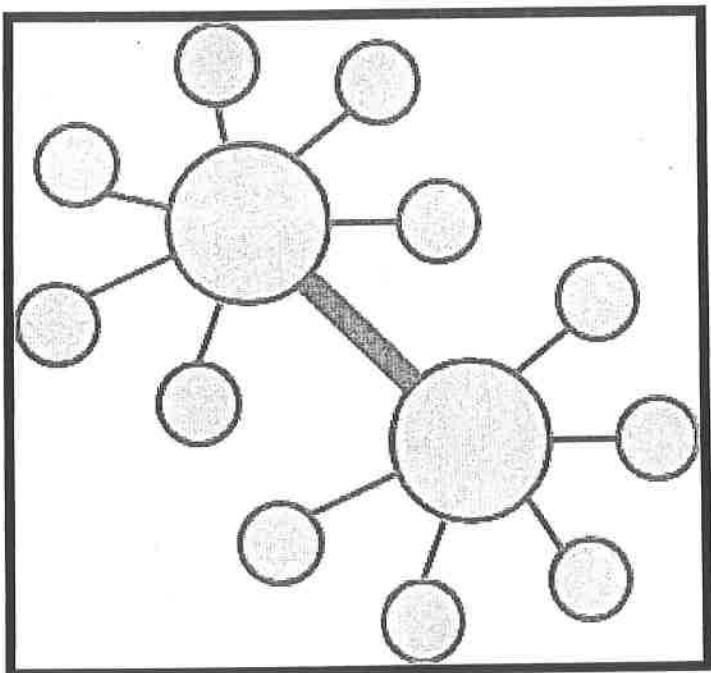
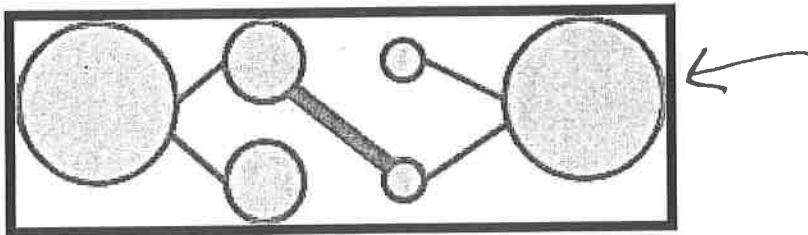


Timbre: ~~independent of~~, "maps well" to character



Please justify your choice:

There were four different pitches, ~~denoting~~ possibly denoting different sized nodes, and 3 chords, possibly denoting the structure of connections.



Please justify your choice:

Not sure, none of them seemed to fit well.
 There were 5 notes/chords played, which might
~~correspond~~ correspond to number of connections.

What is your major?

Cognitive Science

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

Moderately familiar

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Yes, piano since age 5, and guitar since 11.

What genres of music do you listen to?

Classical, Rock, Electronic, Jazz.

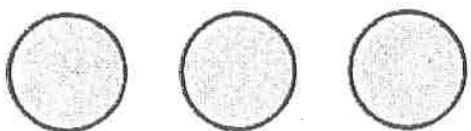
Do you often hum or sing to yourself?

Often, several times per day

Name 3 networks that you are most often in contact with.

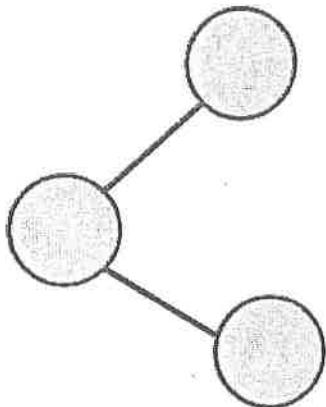
Internet, social network, transportation networks

Number of nodes



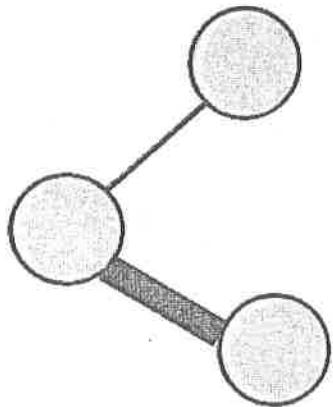
Value, quant rep or quant (dB)
value

How nodes are connected



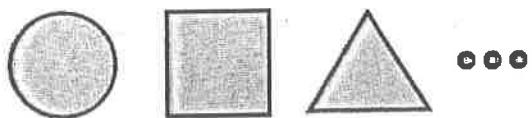
Blay
Harmony ?

Strength of node connections

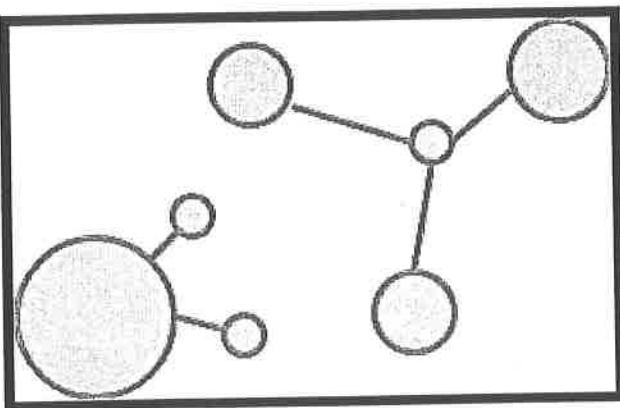
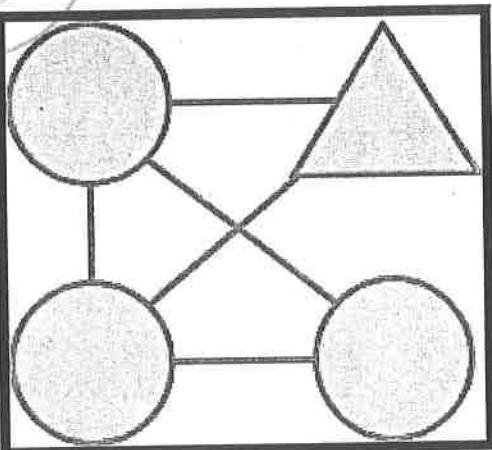
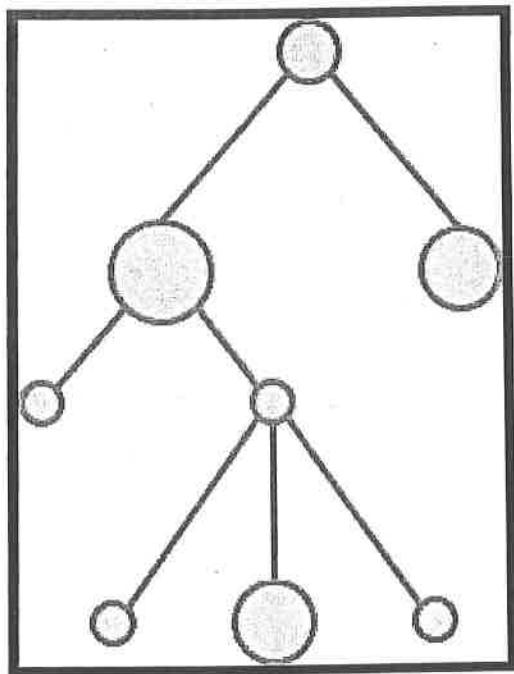


Melody, strength is distance b/w notes

Node shapes



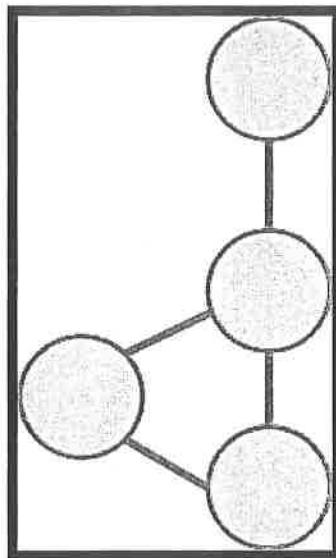
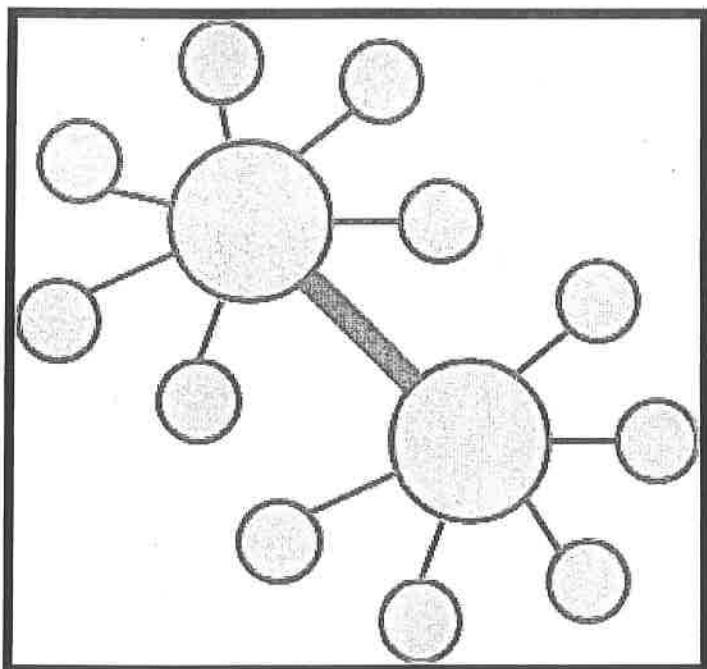
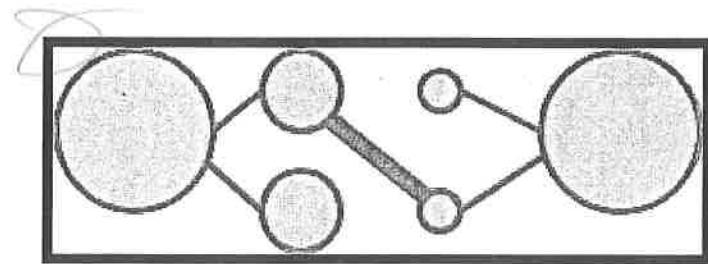
Tumba, differ.
when graphing sounds
you get different shapes



Please justify your choice:

triangle is the consistent chord

Circles are the melody



Please justify your choice:

Graph 1 is father & son playing catch.

The music gives off that vibe too;
peaceful, calm, happy

What is your major?

Cybernetics

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

Not very, I know fractal math

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Sing, piano, guitar, sax

All very casual throughout my life; on/off

What genres of music do you listen to?

Motown, techno, dad rock

Do you often hum or sing to yourself?

Yes

Name 3 networks that you are most often in contact with.

Community neighbourhood,
google scholar,
nature dude ☺

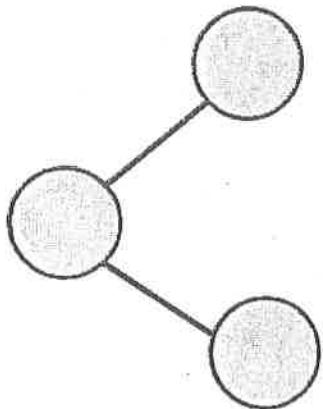
Number of nodes



...

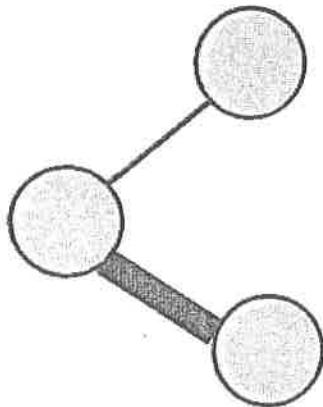
Rhythm - single nodes that aren't connected, can be scattered to create a new rhythm

How nodes are connected



Harmony - node connected / working together to create something new

like



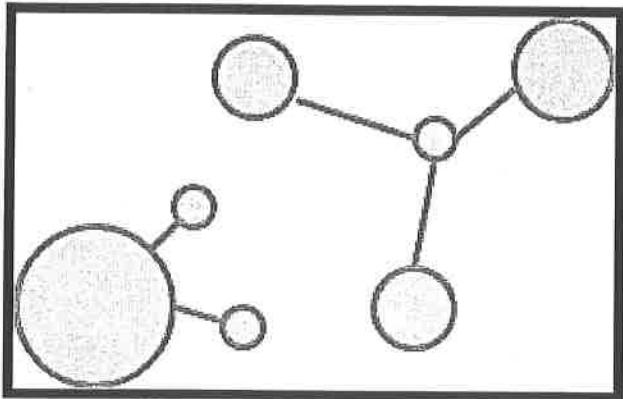
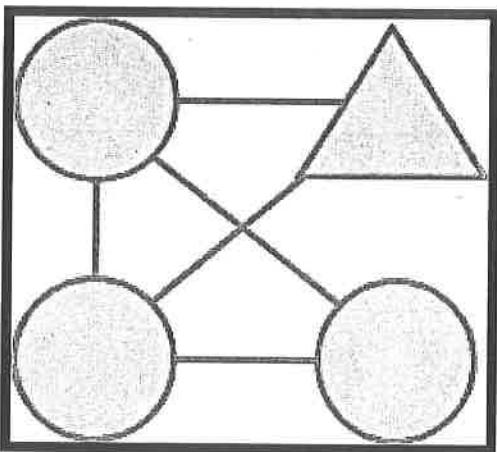
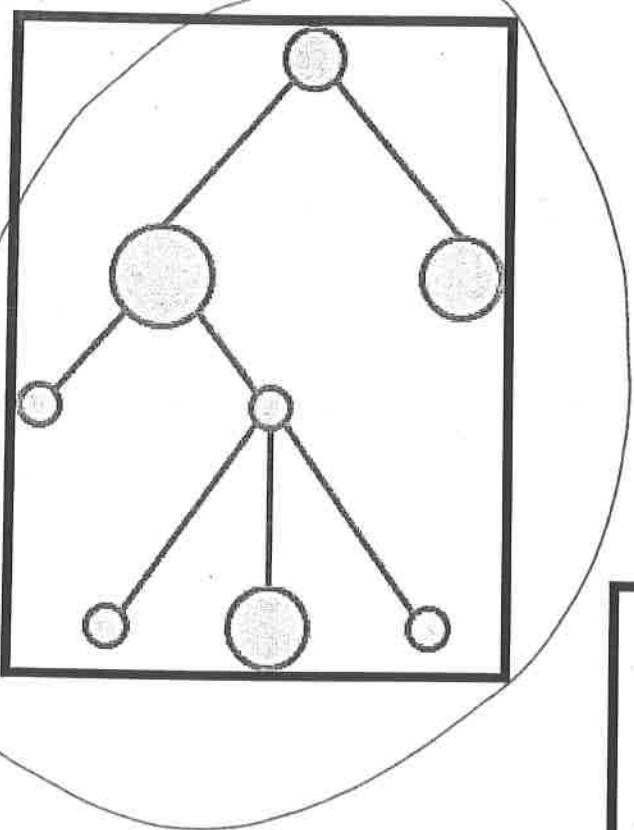
Strength of node connections

Volume - the strength of the connections can correlate to the volume of a note (smaller/thinner line = quiet, bold line = loud)

Node shapes



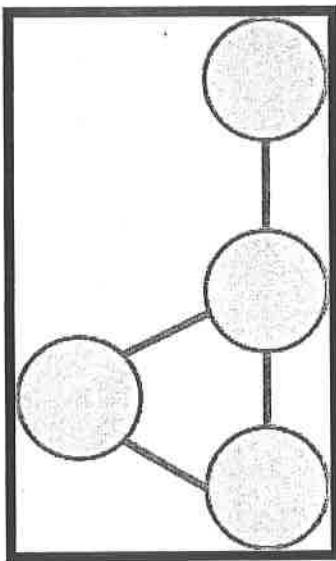
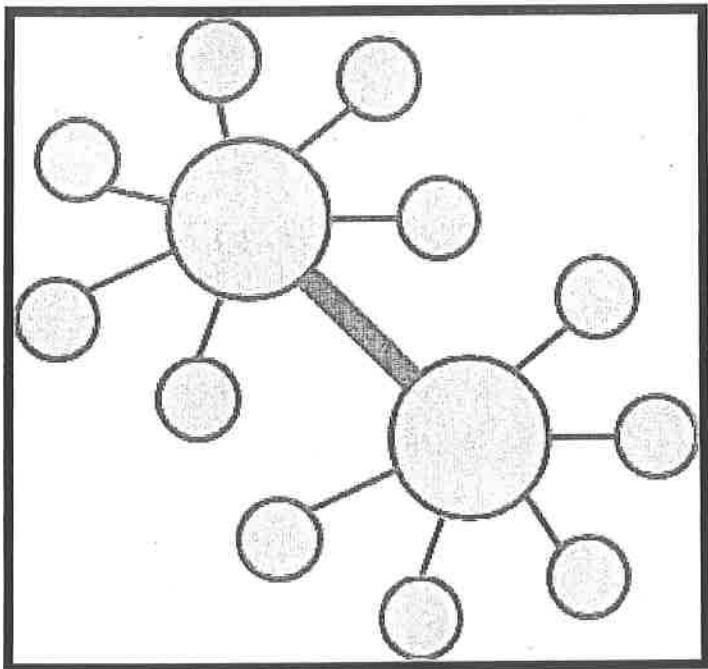
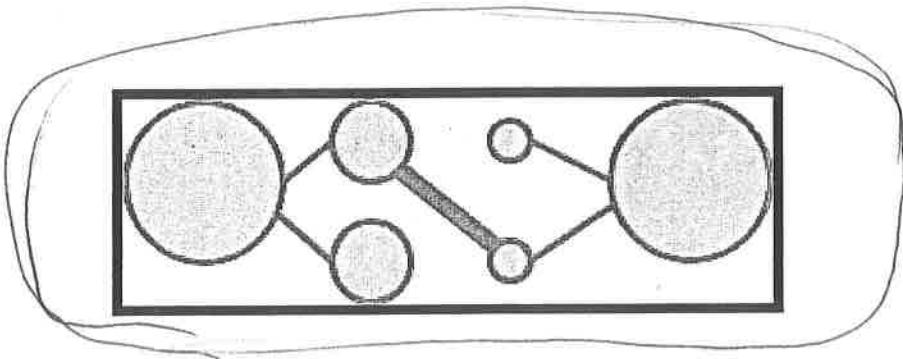
Timbre - different shapes to represent different ~~aspects~~ sounds



Please justify your choice:

The first note corresponds to the first node at the top of the box.

The following notes have other notes ~~play~~ harmonizing with them, shown by a single node (right) and connected node (left) are played at the same time, but with ~~more~~ more ~~less~~ harmonies.
~~notes~~



Please justify your choice:

The single note to start is the leftmost note, with the next notes following ~~the others~~ are shown with node connections. The bells are louder than the rest, which could be the two ~~connected across with~~ nodes connected with a bold line.

What is your major?

Cog Sci w/ a focus in AI / HCI

What is your gender?

~~Male~~ female

Before this exercise how familiar were you with the features of networks?

somewhat familiar

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Both, clarinet for 4 years, trombone for 2, guitar for 6, and I participated
in choir for about 4 years

What genres of music do you listen to?

Alternative

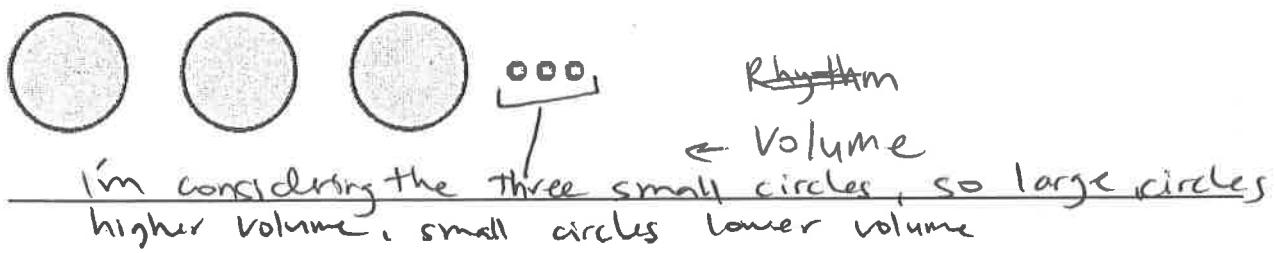
Do you often hum or sing to yourself?

All the time

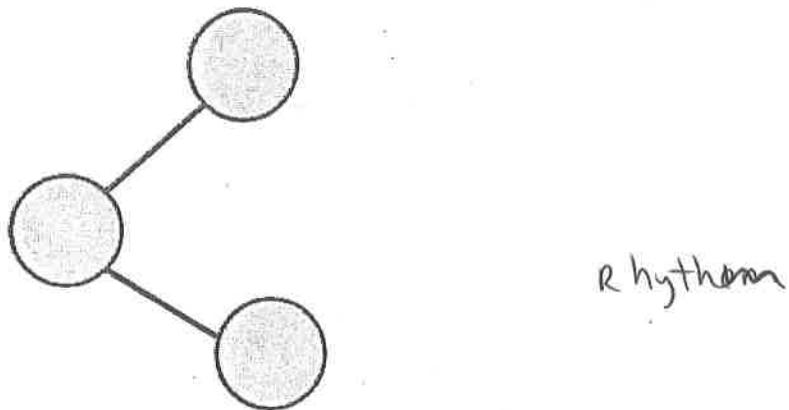
Name 3 networks that you are most often in contact with.

Email networks (for work), networks related to my major,
social networks to keep up with friends from home

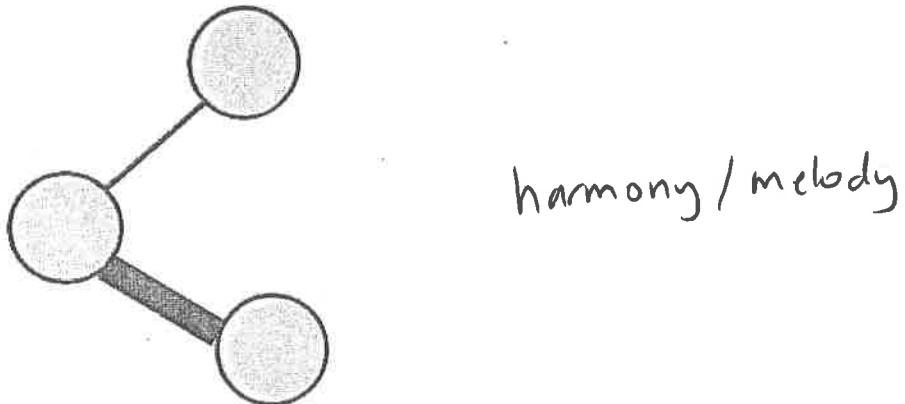
Number of nodes



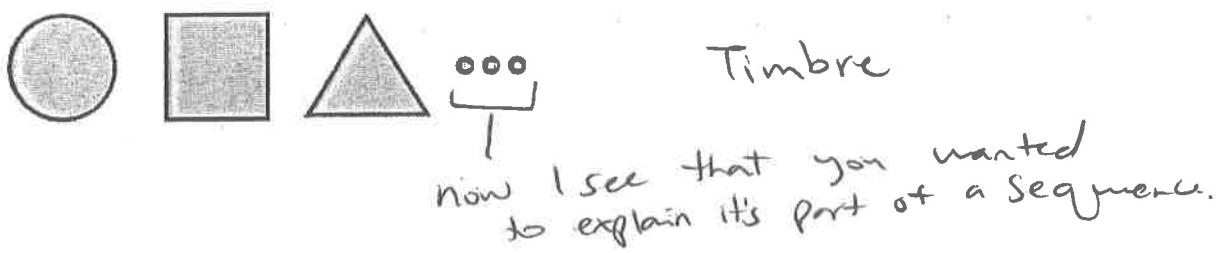
How nodes are connected

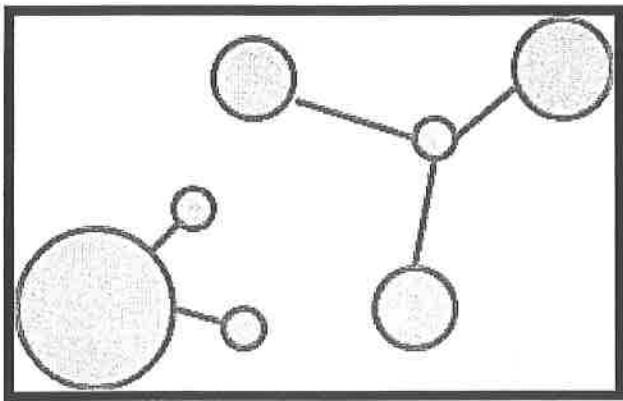
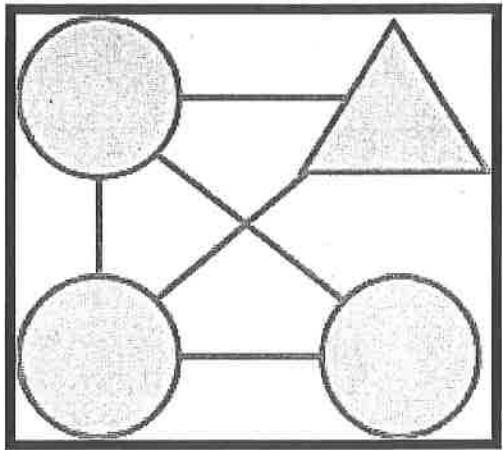
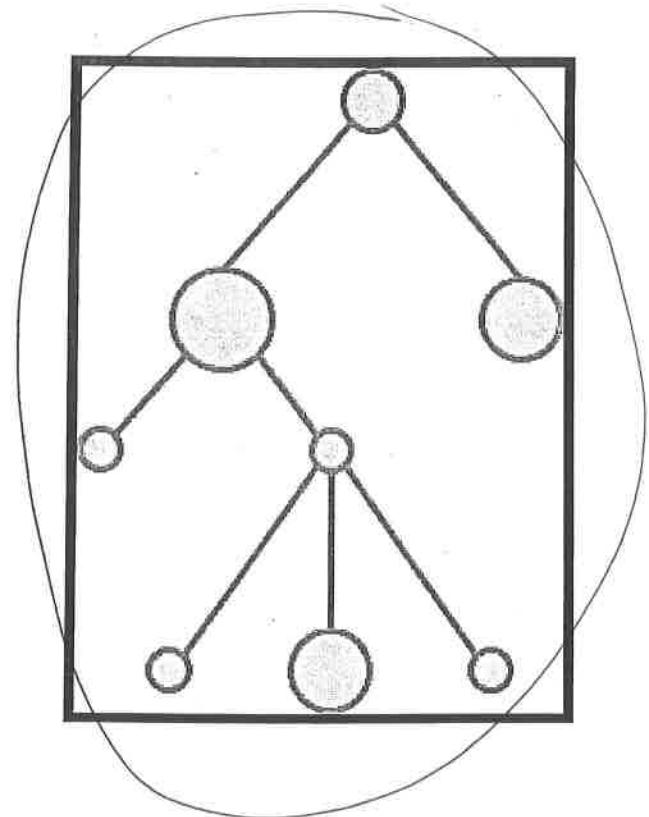


Strength of node connections



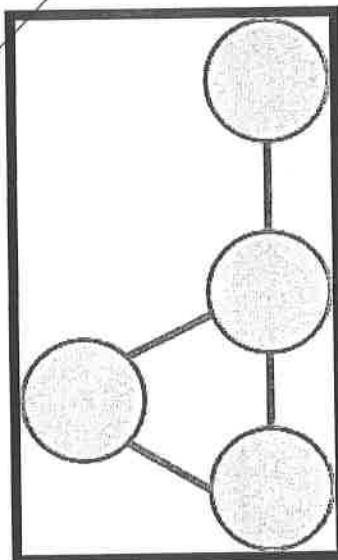
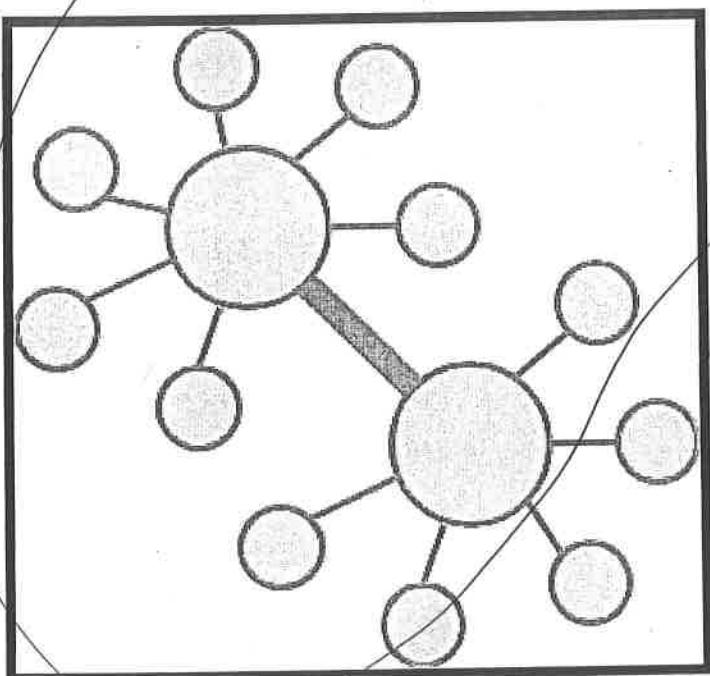
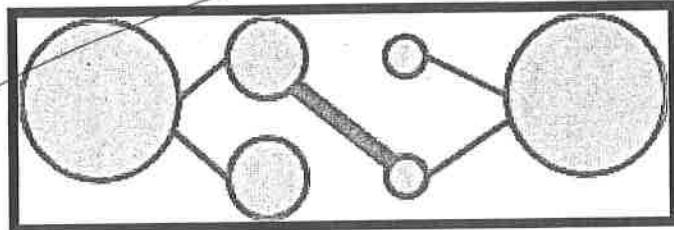
Node shapes





Please justify your choice:

Feels like it follows the rhythm / melody but not perfectly. There is a sense of connection in the music, timbre stays the same but the duration of each note changes, that matches the different sizes of the circles.



Please justify your choice:

Something between these two.
 the bells in the end feel like  but in terms
 of melody & rhythm  feel more representative

What is your major?

What is your gender? F

Before this exercise how familiar were you with the features of networks?

familiar

Did/do you play an instrument or sing? What instrument/song and when (or until when)?
I learned to play the piano but forgot.

What genres of music do you listen to?

Rock

Do you often hum or sing to yourself?

No

Name 3 networks that you are most often in contact with.

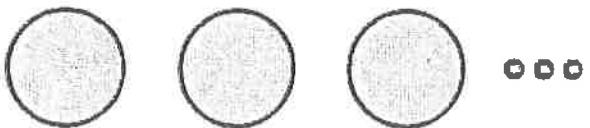
alumni network

fb groups

electricity

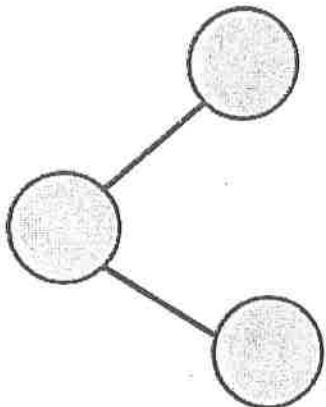
the internet ...

Number of nodes



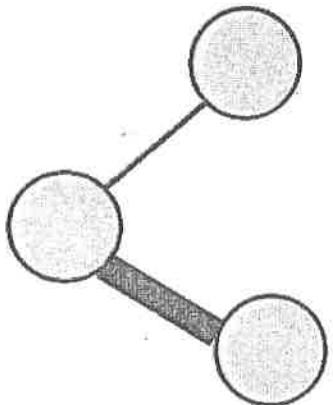
Rhythm, looks like rhythm game
format

How nodes are connected



melody, it's like multiple sounds
put together

Strength of node connections

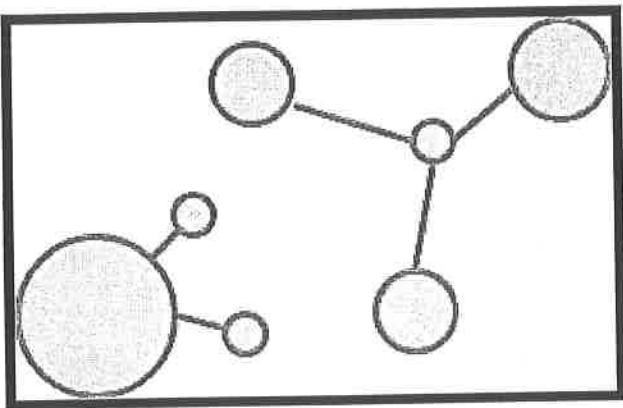
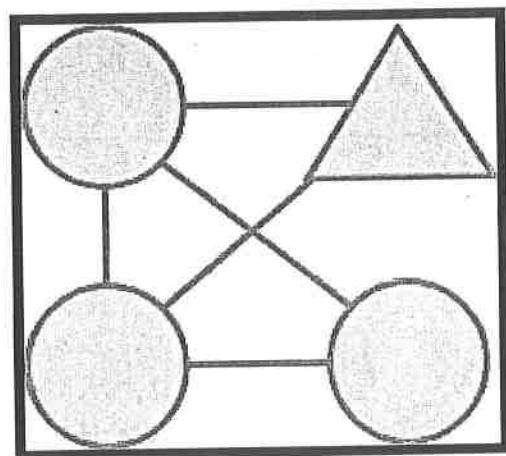
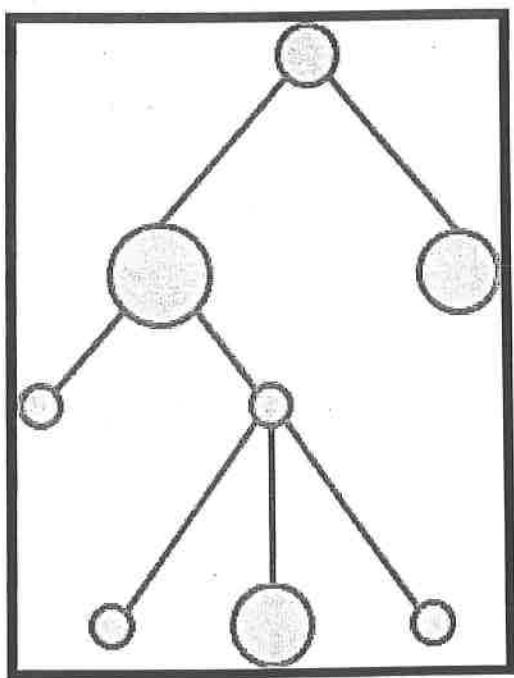


Volume, loud = strong, quiet = weak

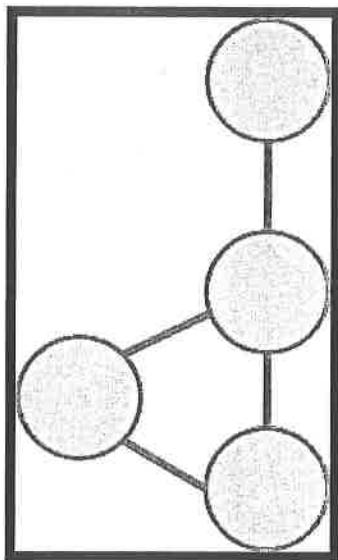
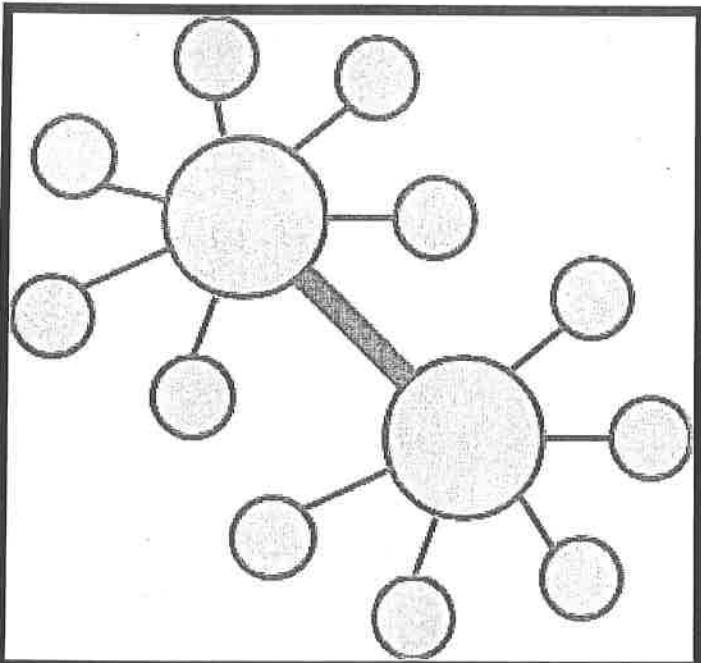
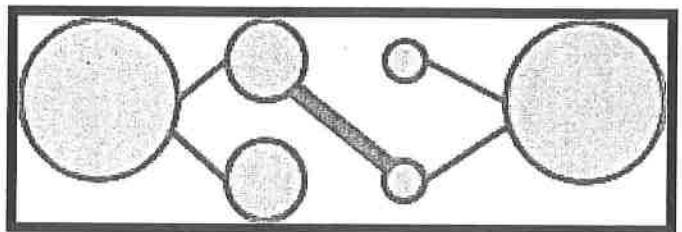
Node shapes



Timbre, each node is like
different instrument



Please justify your choice: one sound is slightly different, and there is no pattern that matches other graph



Please justify your choice: two different sounds, one only plays along with the other.

What is your major?

computer science; Game design

What is your gender?

male

Before this exercise how familiar were you with the features of networks?

little, maybe, very little

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

no

What genres of music do you listen to?

rock

Do you often hum or sing to yourself?

yes

Name 3 networks that you are most often in contact with.

don't know any

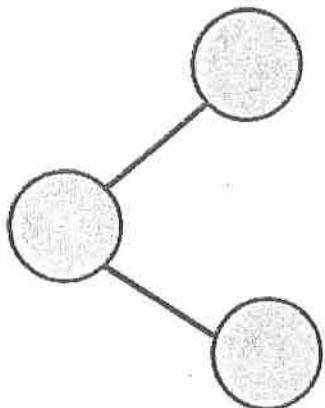
Number of nodes



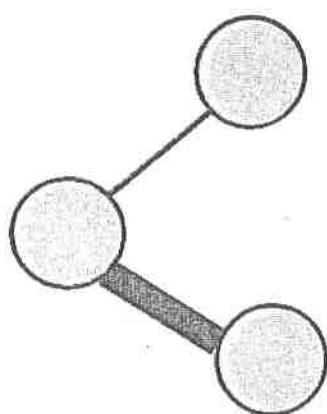
ooo

Pitch - each node representing a pitch/note

How nodes are connected



Melody - nodes are connected to create a larger graph; notes are strung together to create a melody.



Strength of node connections

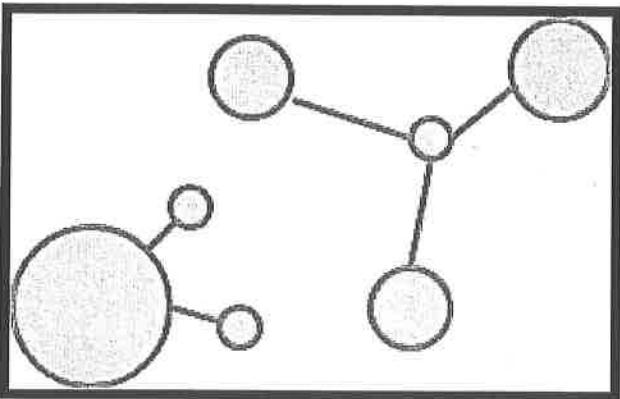
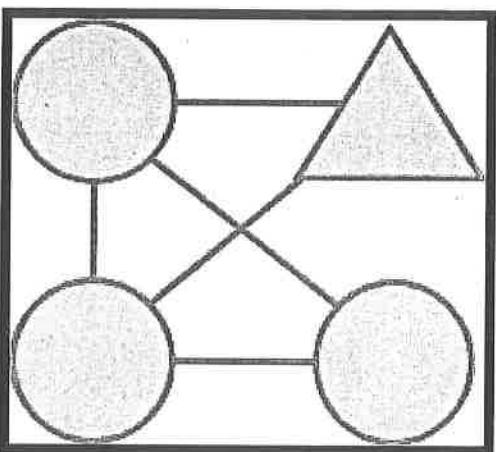
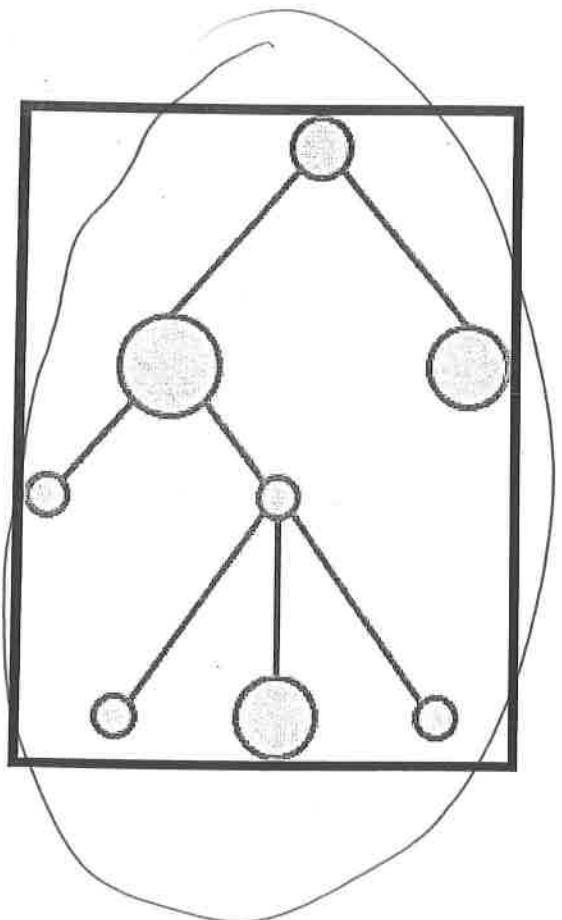
Harmony - some notes harmonize better together than others; this harmonization can be thought of as the strength of the connection between notes

Node shapes

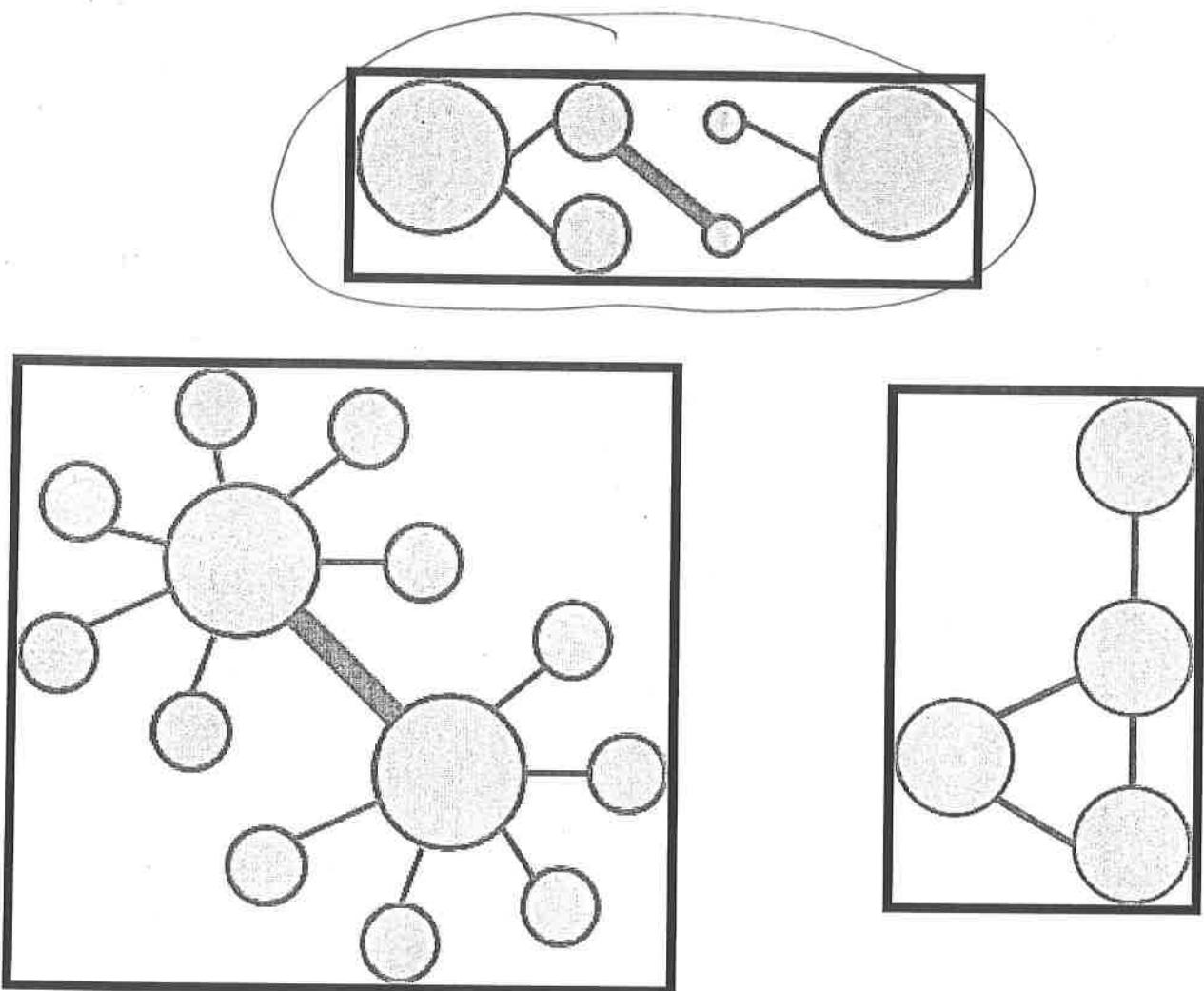


ooo

Timbre - one note could have multiple "shapes," each "shape" being an instrument.



Please justify your choice: All of the notes played combine to form a melody, and ~~some~~^{all} of them ~~can~~ harmonize with the rest (equal connection strength). They all sound like they are played by the same instrument. (same shape). None of the notes or melody sound disjointed (all are connected).



Please justify your choice: The first and last notes are held longer (duration \Rightarrow size).

The middle notes are ~~sharply~~ harmonized (stronger connection).

What is your major?

CS : Game Design

What is your gender?

Male

Before this exercise how familiar were you with the features of networks?

Very familiar

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

Bass guitar, upright bass. Played for 4 years in high school.

What genres of music do you listen to?

Classic rock, film scores, metal, progressive rock

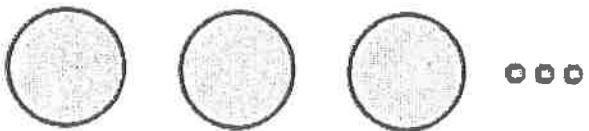
Do you often hum or sing to yourself?

Very often.

Name 3 networks that you are most often in contact with.

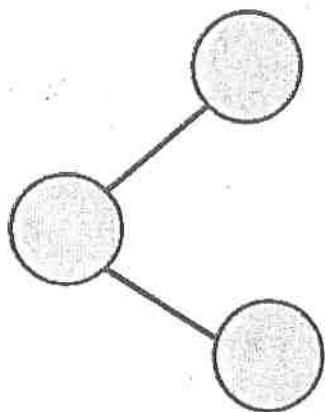
Bus network, social media, family

Number of nodes



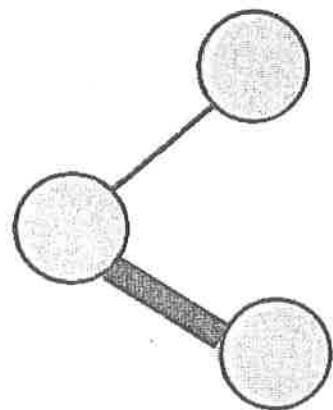
pitch → the higher the pitch, the more # of nodes

How nodes are connected



Harmony
If each note with different pitch is represented a connection between 2 nodes should be the 2 pitches played together.

Strength of node connections

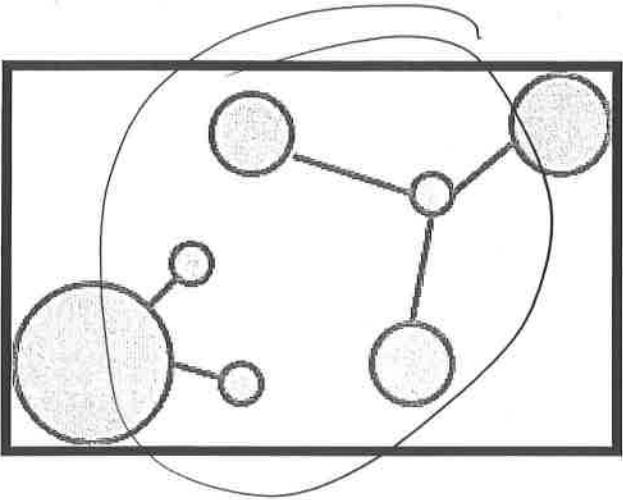
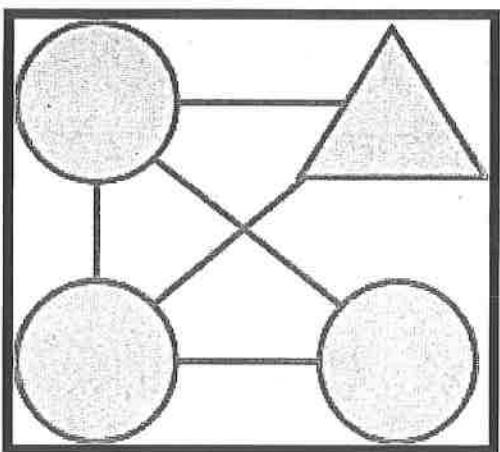
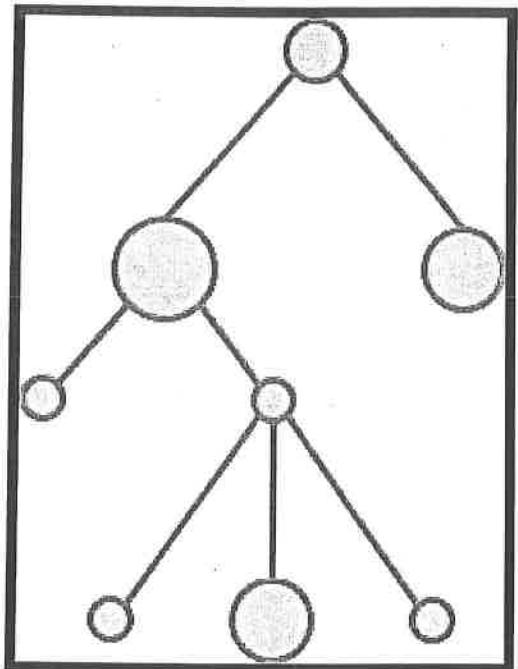


duration
the stronger the link
the longer the duration

Node shapes

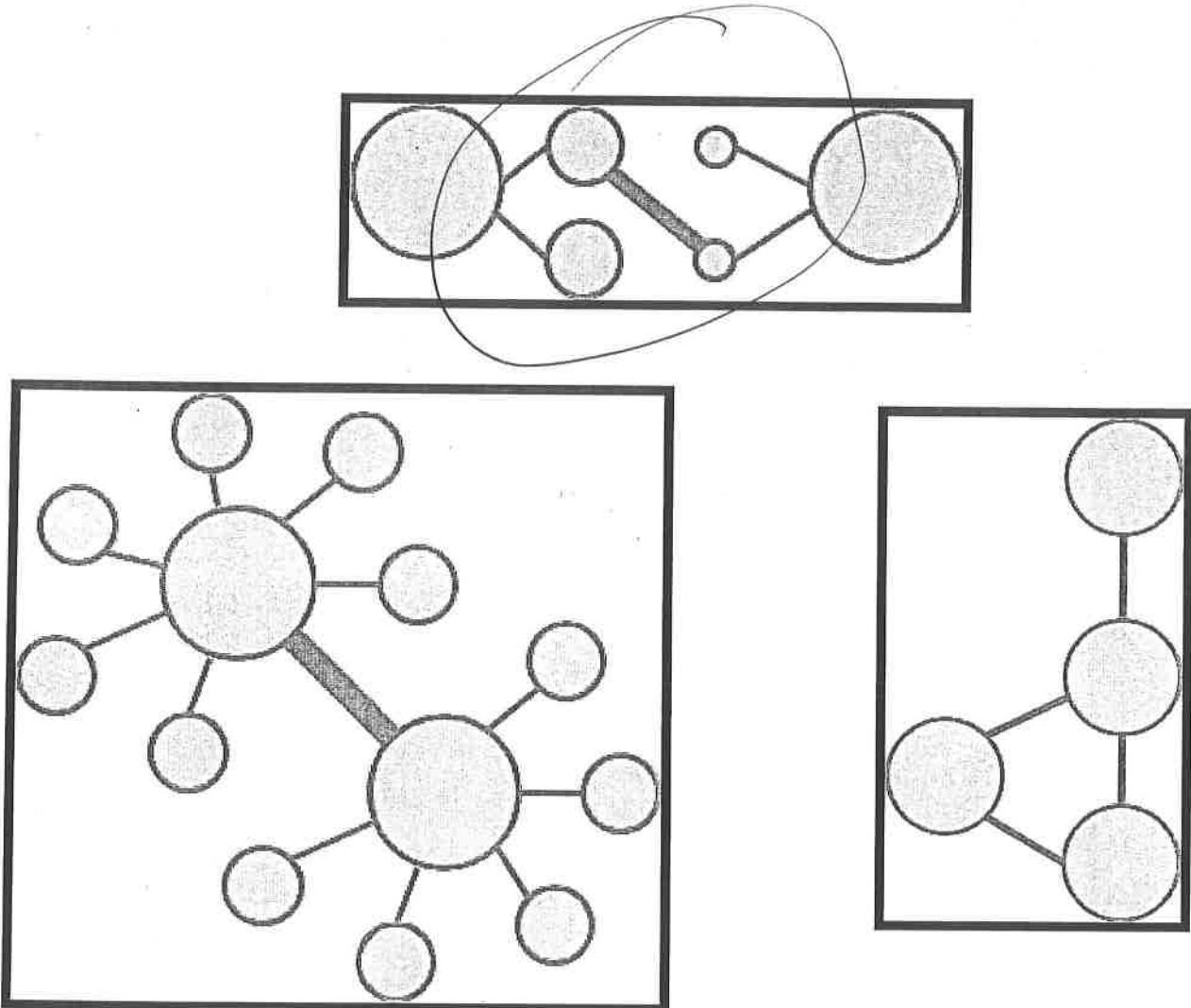


fibre → use different musical instrument for different shape



Please justify your choice:

There are 2 distinct musical pieces, the first is a harmony (left part of the chosen graph), the second is a series of serially played notes (right part of the chosen graph)



Please justify your choice:

There are 3 distinct musical pieces, the left node is a single note, then a jumble of notes to represent the crowd in the middle of the graph, and then a harmony of 2 notes to represent the 2 nodes on the right.

What is your major? CM

What is your gender? Female

Before this exercise how familiar were you with the features of networks?

Quite familiar

Did/do you play an instrument or sing? What instrument/song and when (or until when)?

I played electric organ 20 years ago

What genres of music do you listen to?

Classical music

Do you often hum or sing to yourself?

Yes

Name 3 networks that you are most often in contact with.

Underground map

Hierarchies

Social networks