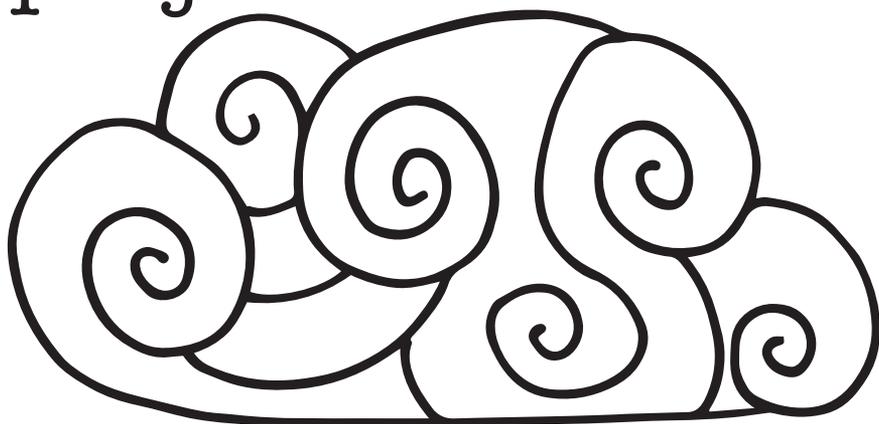


Maybe
Something
Beautiful:
a living guide for
a family design
project

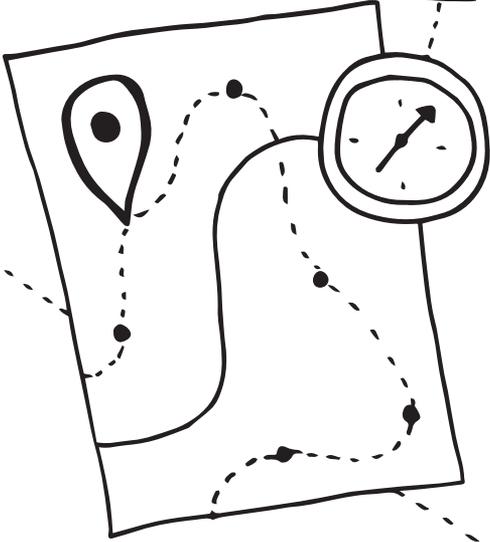
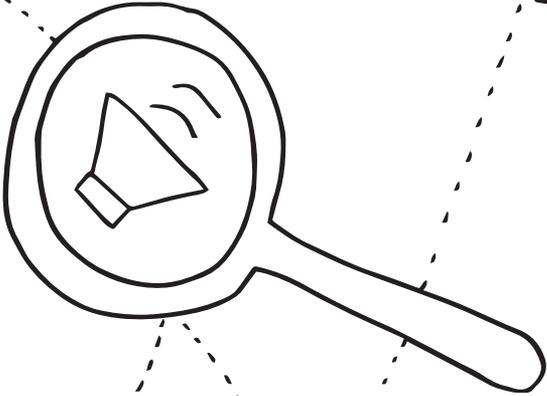


Welcome!

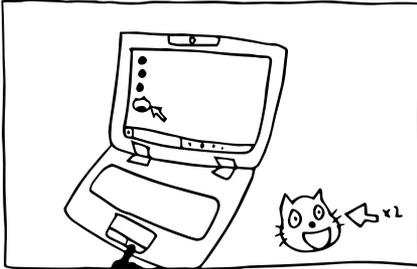
This is a living document. We want to know about the beauty your family creates. Please write, draw, and color in me. Put me back in the backpack so that the next family can learn from your expertise!

What is your family most proud of? Where did some of you get stuck? What roles did family members take on to help each other to get unstuck?

PLAY and Explore



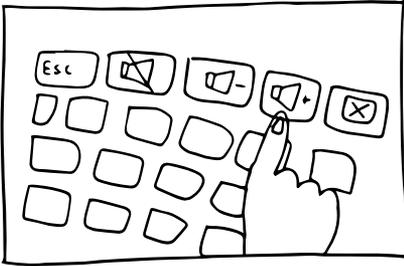
open **scratch** by double clicking icon



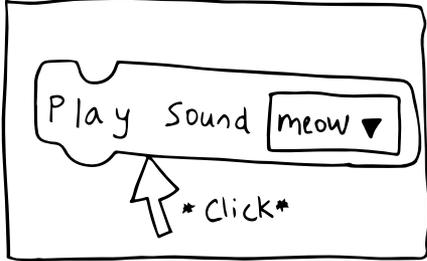
click **sound** under scripts and drag to right side



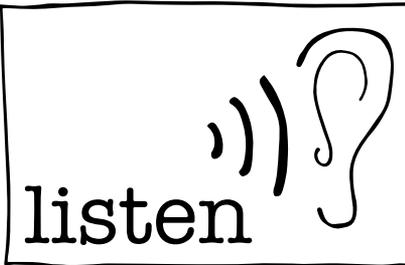
turn up the **volume!**



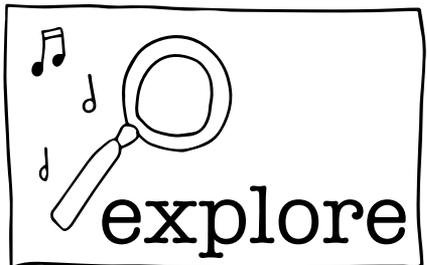
click on the script



what did you hear?

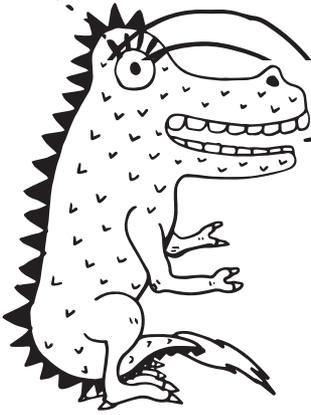


can you **find** the drums?



How many different sounds
can your family make?

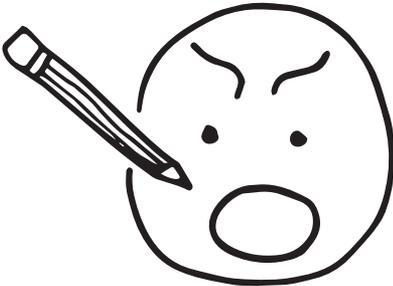
PLAY and Explore



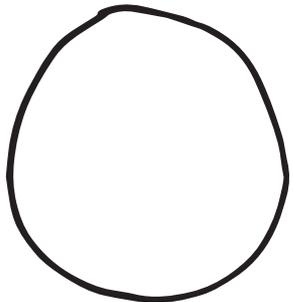
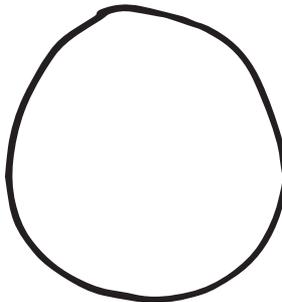
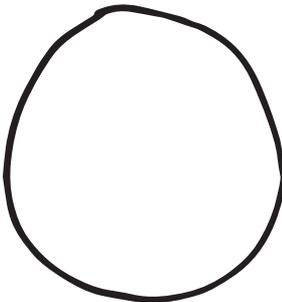
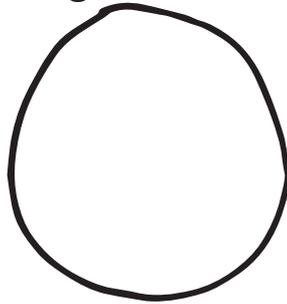
Reflect on your experiences exploring sounds in Scratch.

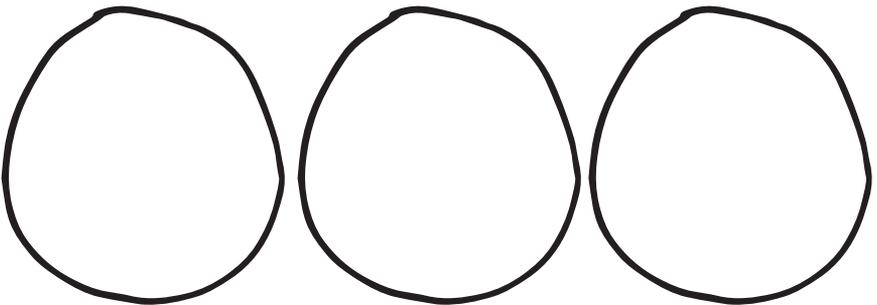
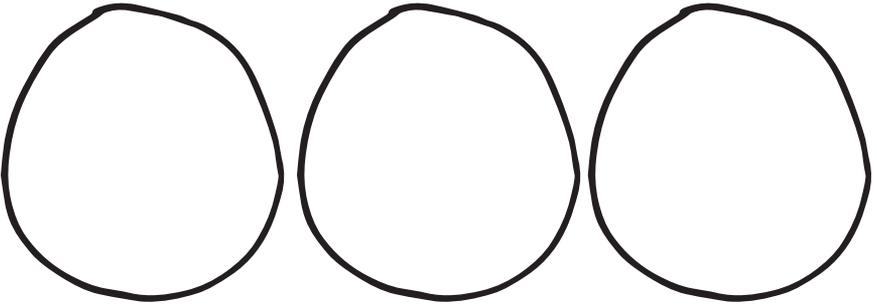
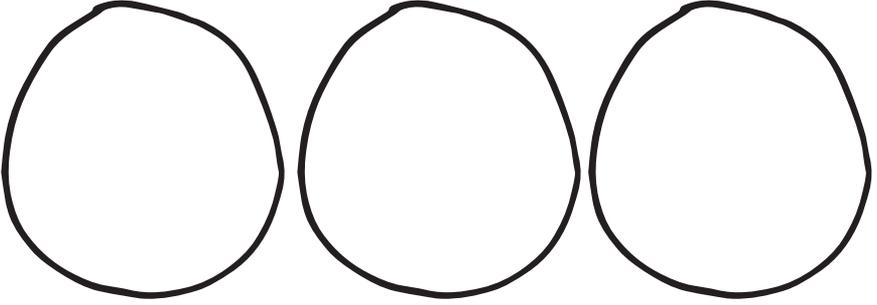
How did each of you feel when playing with the sounds?

Have each member of your family draw & write some feelings:



surprised & frustrated
& a little curious





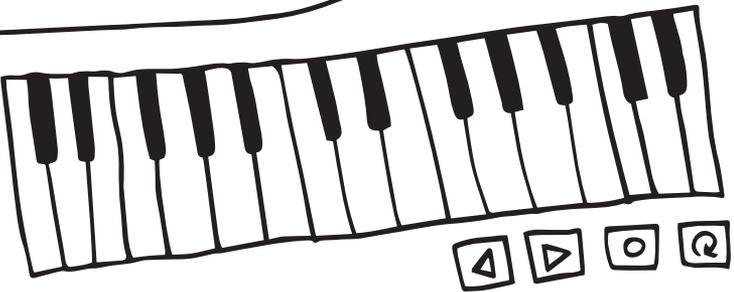
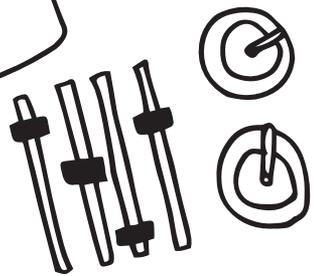
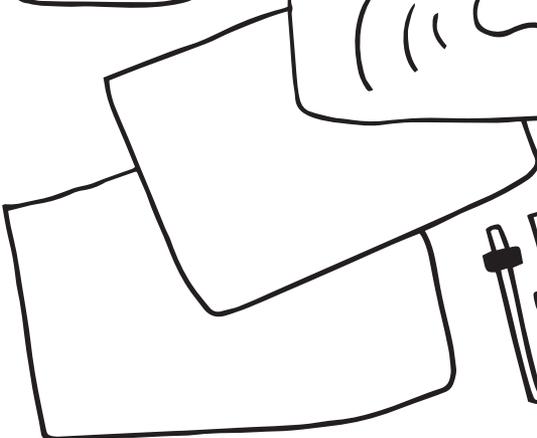
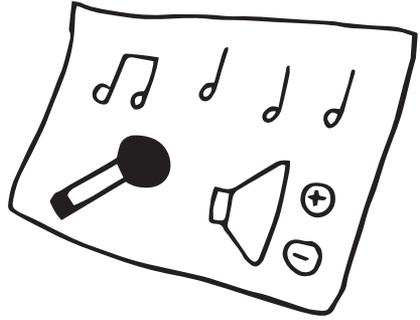
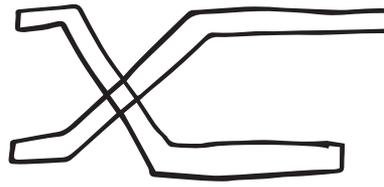


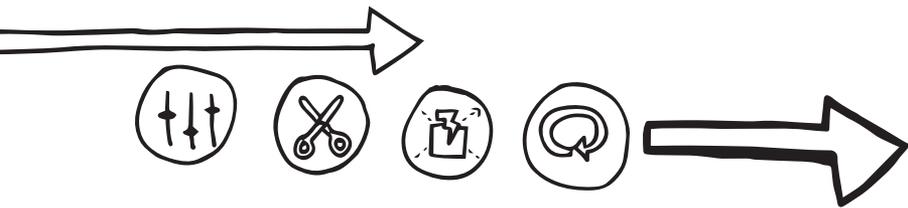
share something beautiful here



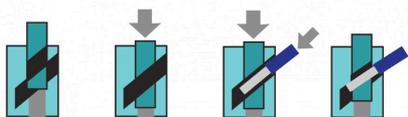
where is your family? what parts of that place
make it important to your family?

REMIX



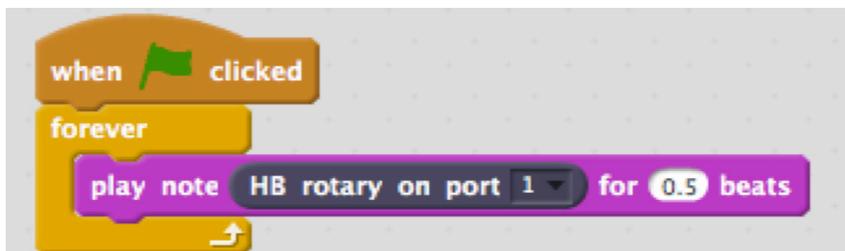


1. Plug the Hummingbird into your computer
2. Open Bird Brain Robot Server to connect Scratch to Hummingbird
3. Try connecting a rotary sensor to your Hummingbird
4. Can you use the sensor to remix your sound?



black
red
yellow

try it!

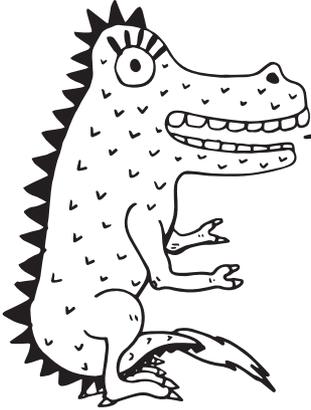
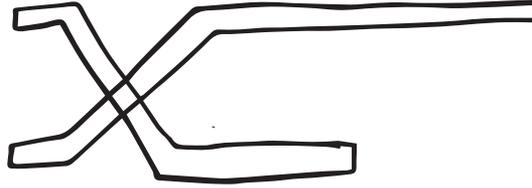
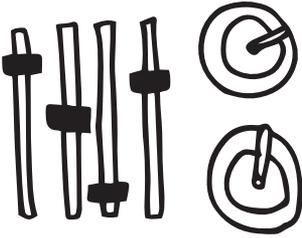


**change
it up!**



What if you use a different sensor?

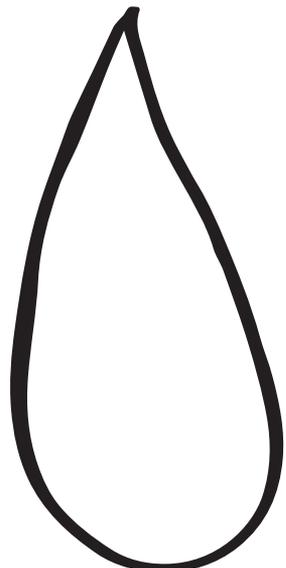
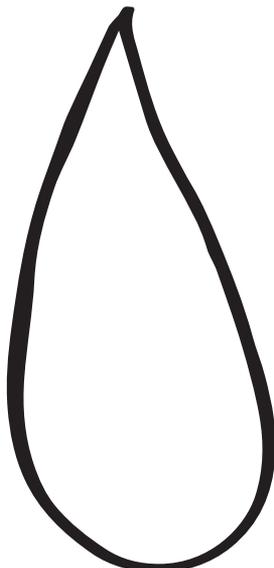
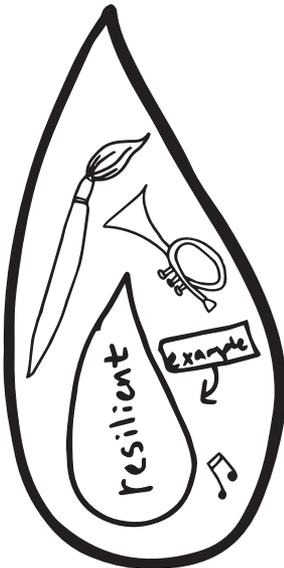
Can someone in your family use a sensor to change the volume? An instrument? The tempo?

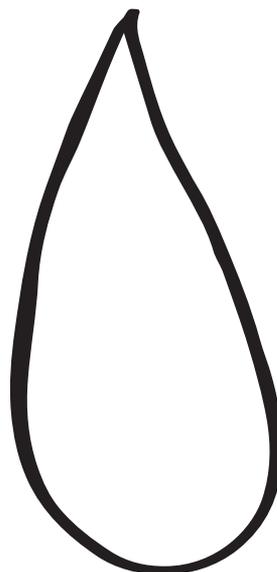
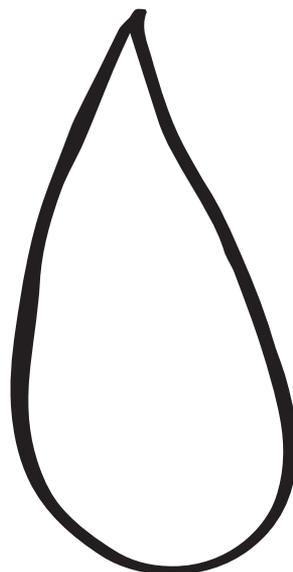
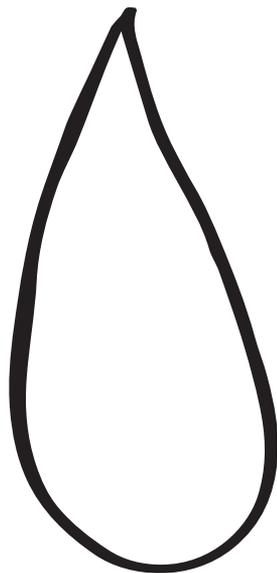
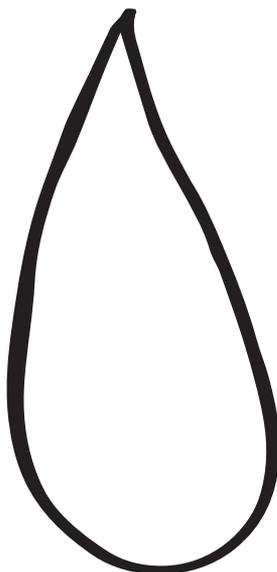
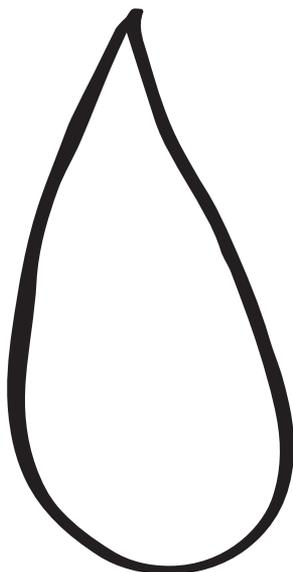
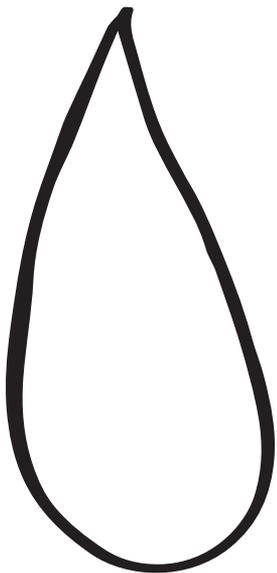


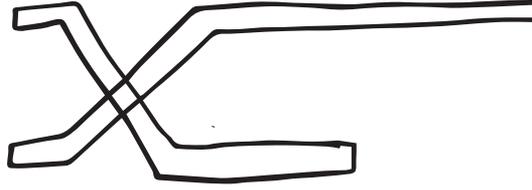
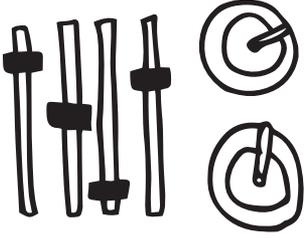
What did each of your family members try changing?

Mira and her community cared about art. What does your family and community care about?

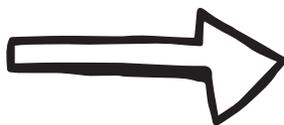
Draw & write what you and your community care about





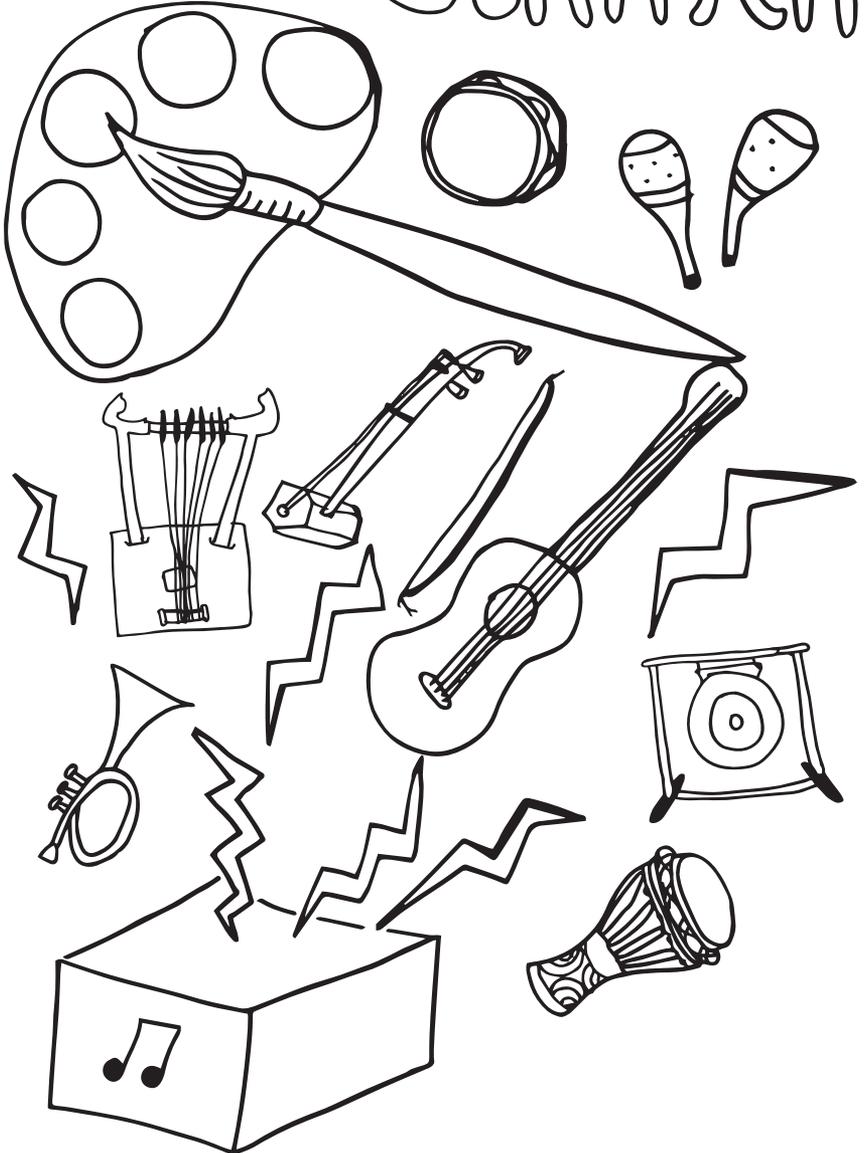


share something beautiful here



share a message for the next family here

CREATE *from* SCRATCH



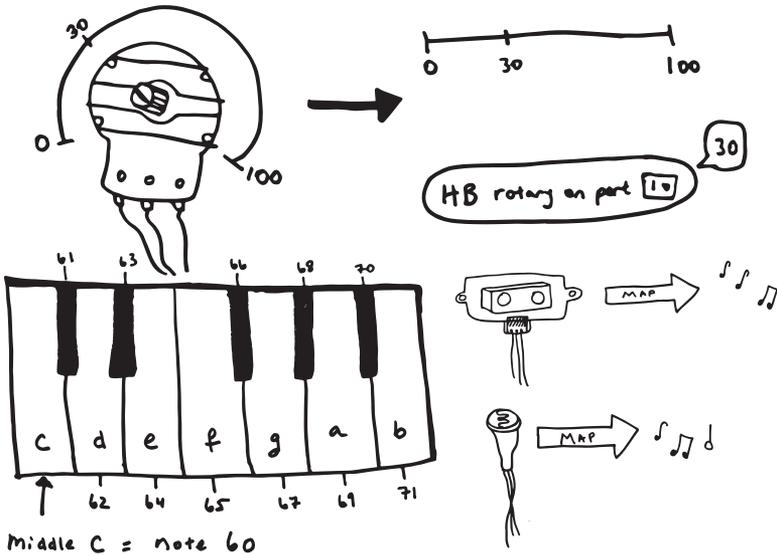


Mira believed that color lit up her community like the sun. What brings light into your family's life? Can you make a rhythm together that shines like the light in your community? How many different sensors can you include?

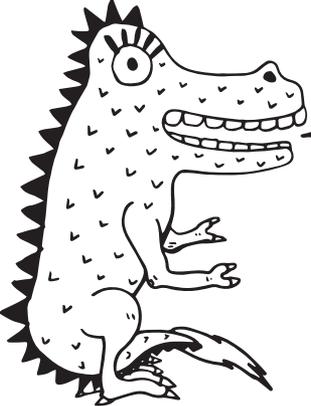
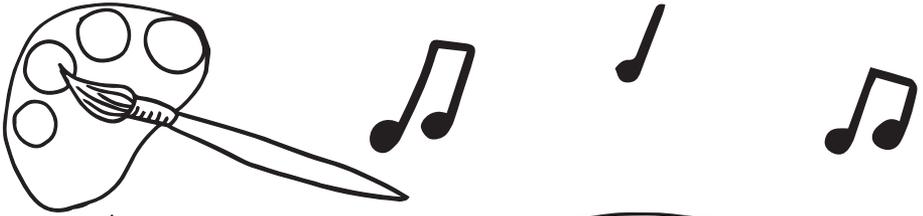
Helpful tools:

```

when clicked
  forever
    set tempo to 100 - HB distance sensor on port 3 bpm
    play note HB rotary on port 1 for 0.25 beats
    rest for 0.25 beats
    play drum 10 for 0.25 beats
    rest for 0.25 beats
  
```



Challenge someone in the family to use the distance or light sensor to change your musical creation. Can someone use them to change the way it sounds or the speed of the music?



How are our friends earth, water, sky, and energy doing?

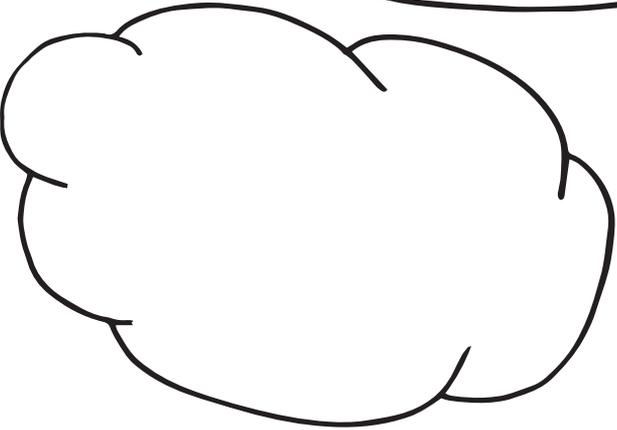
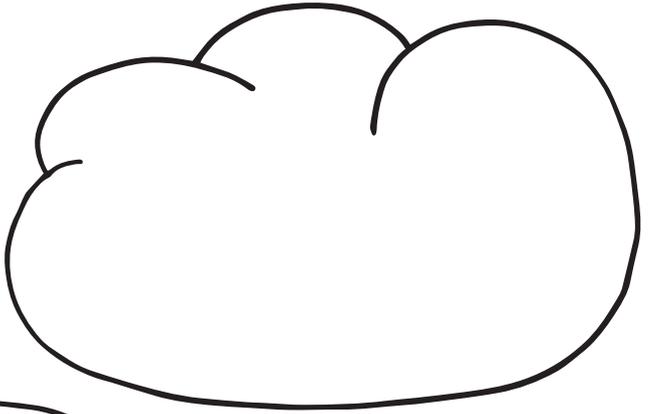
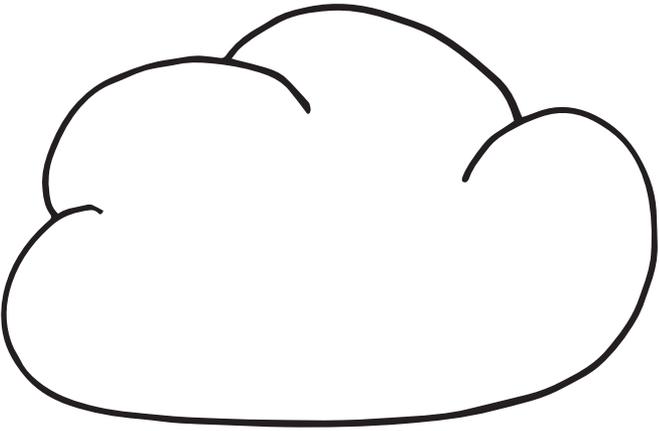
What is beautiful in your community?

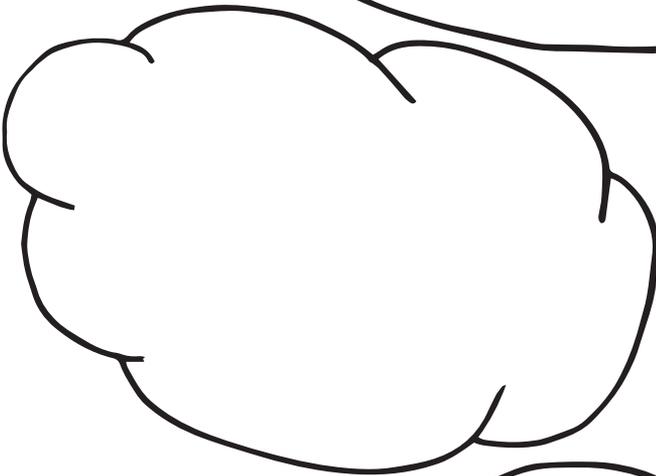
What did Mira dream of?

Now it's your turn!

What does your family dream of for the future? How are earth, water, sky, and energy members of your community? What roles do they play in your life?



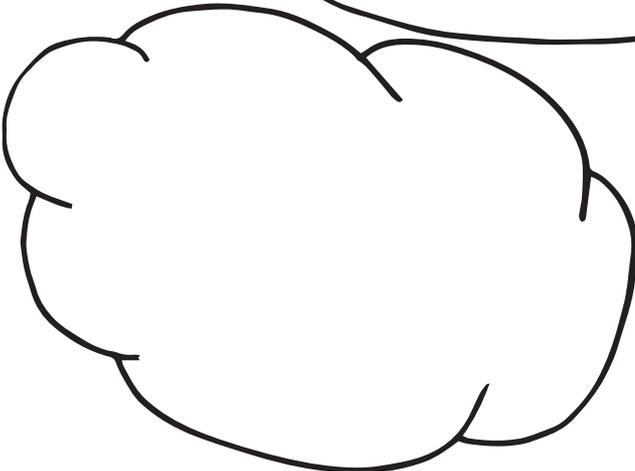
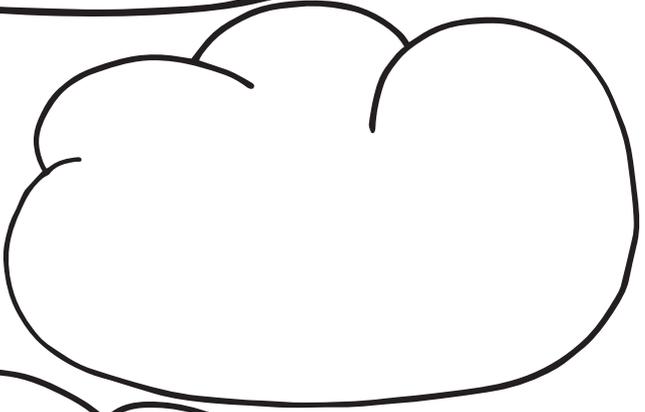




Why is your
community
beautiful?

How do each
of you connect
through to your
community?
Through music?
Art? Dance?





What does
your family
dream of for
the future?

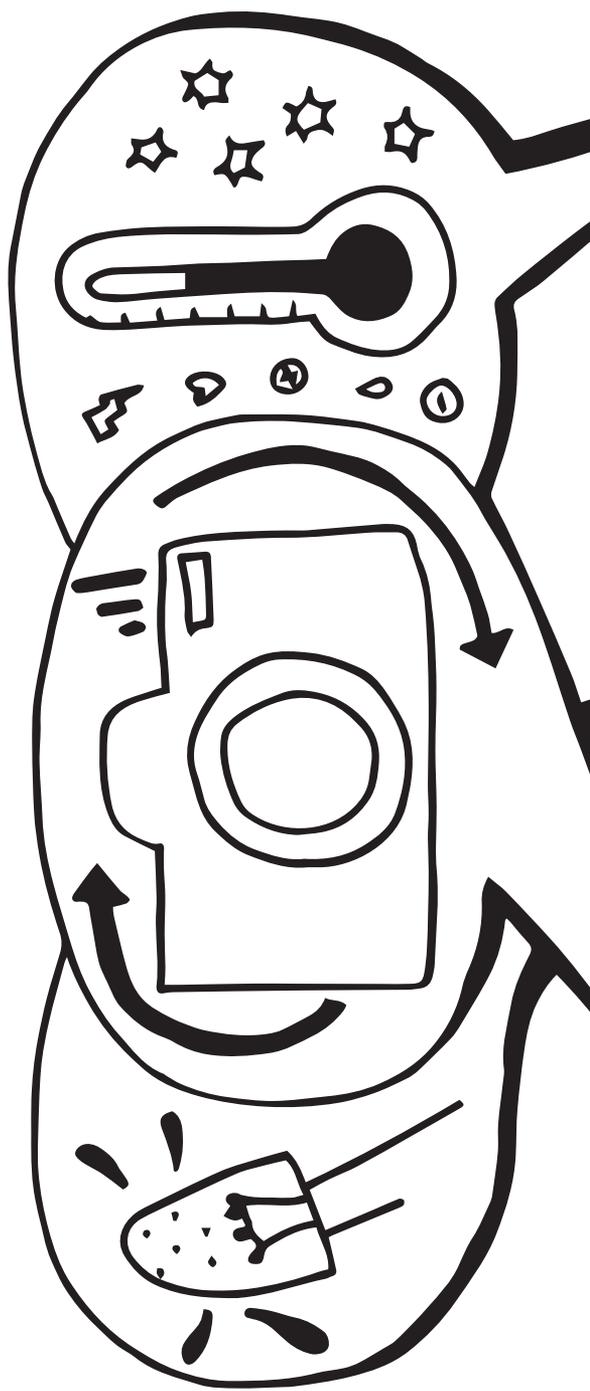


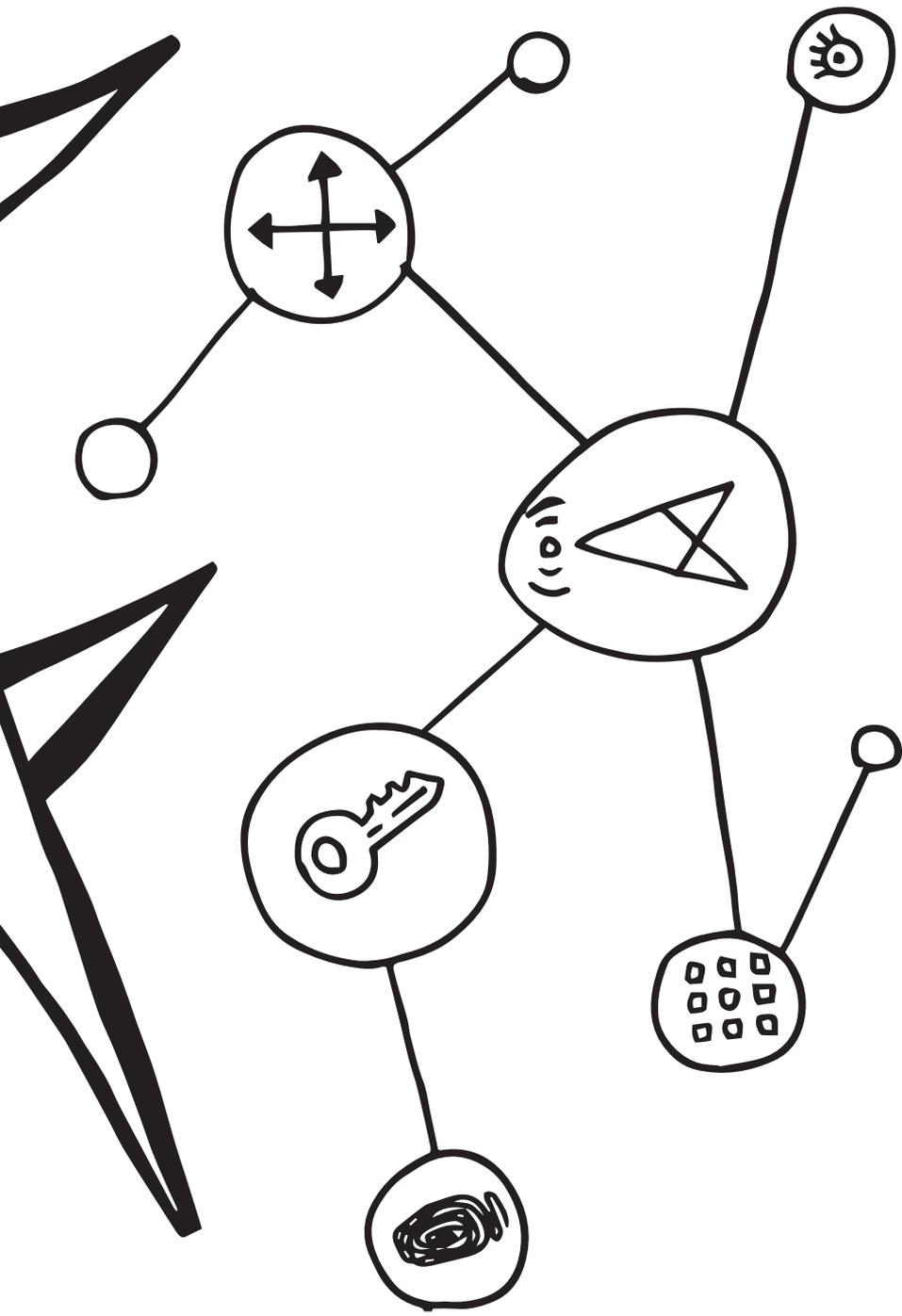
share something beautiful here



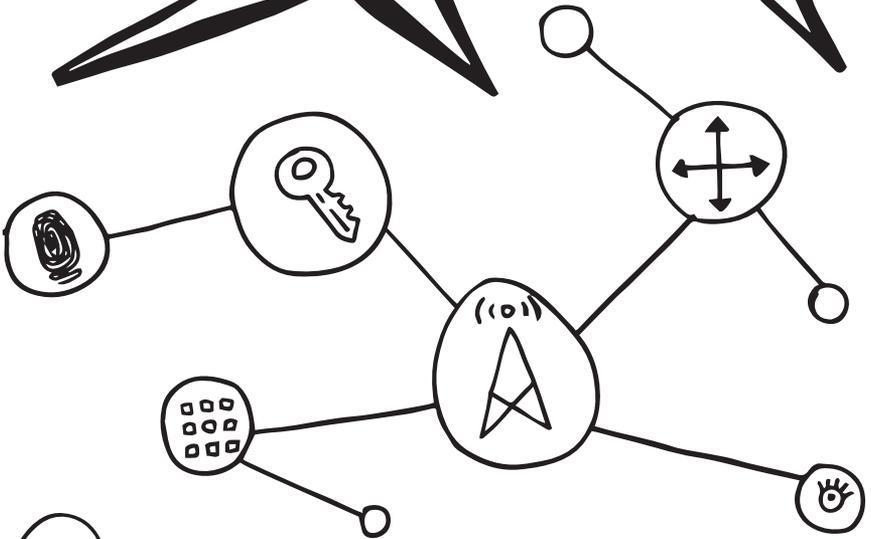
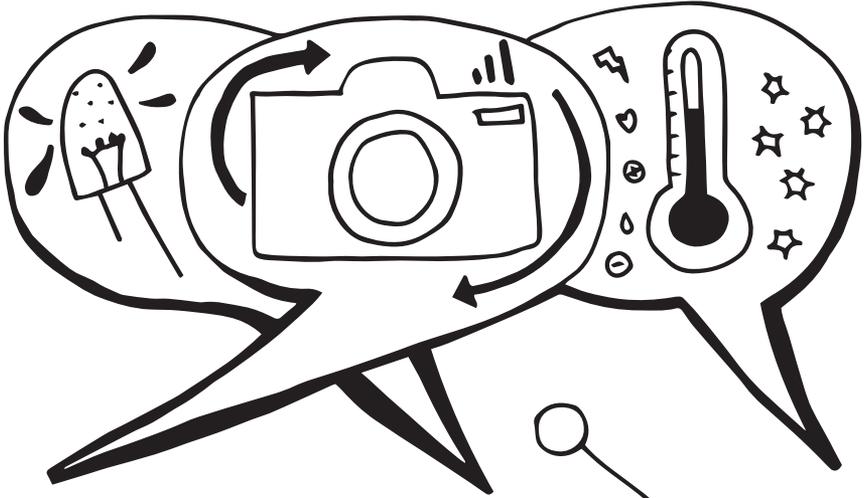
share some helpful hints for using the hummingbird kit
for the next family here

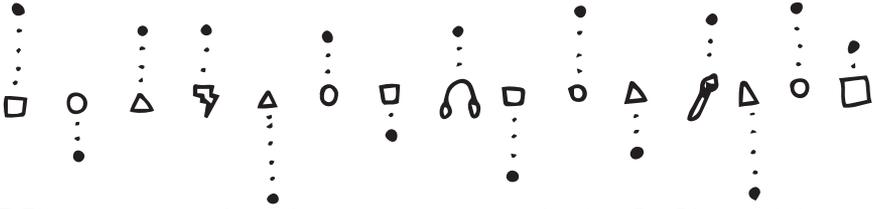
STEP it UP!





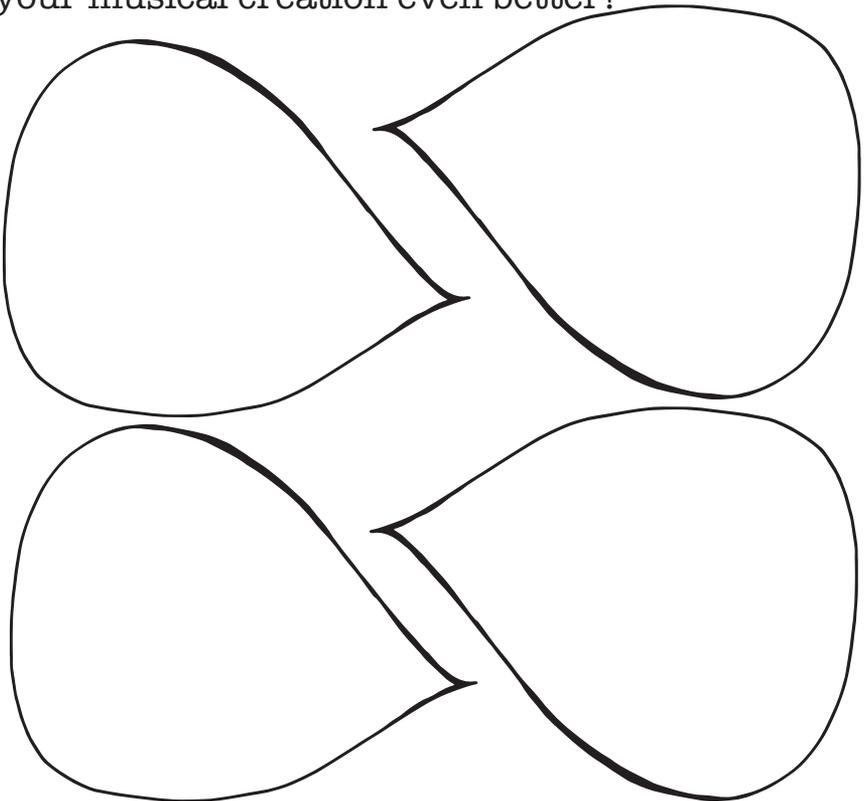
STEP *it* UP!

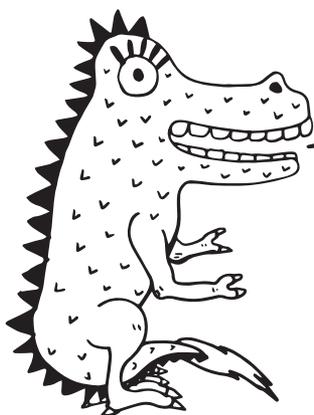
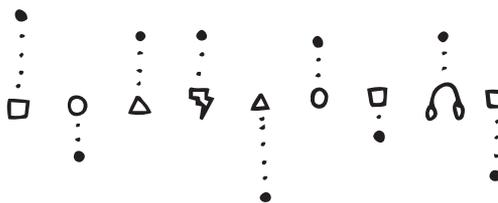
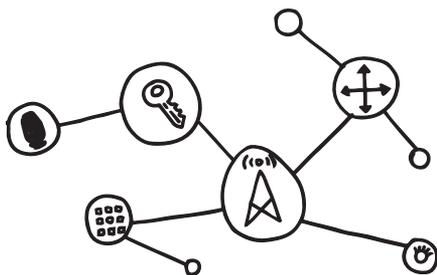




Mira connected to a movement she believed in that was larger than herself. She accepted input from others which helped shape the impact of art in her neighborhood.

Be proud of your work! Show your family's work to others in your community. Ask for their help in improving your ideas. Share one piece of feedback that your family used to make your musical creation even better!



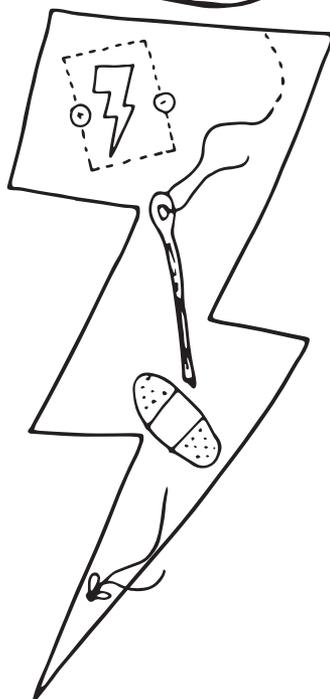


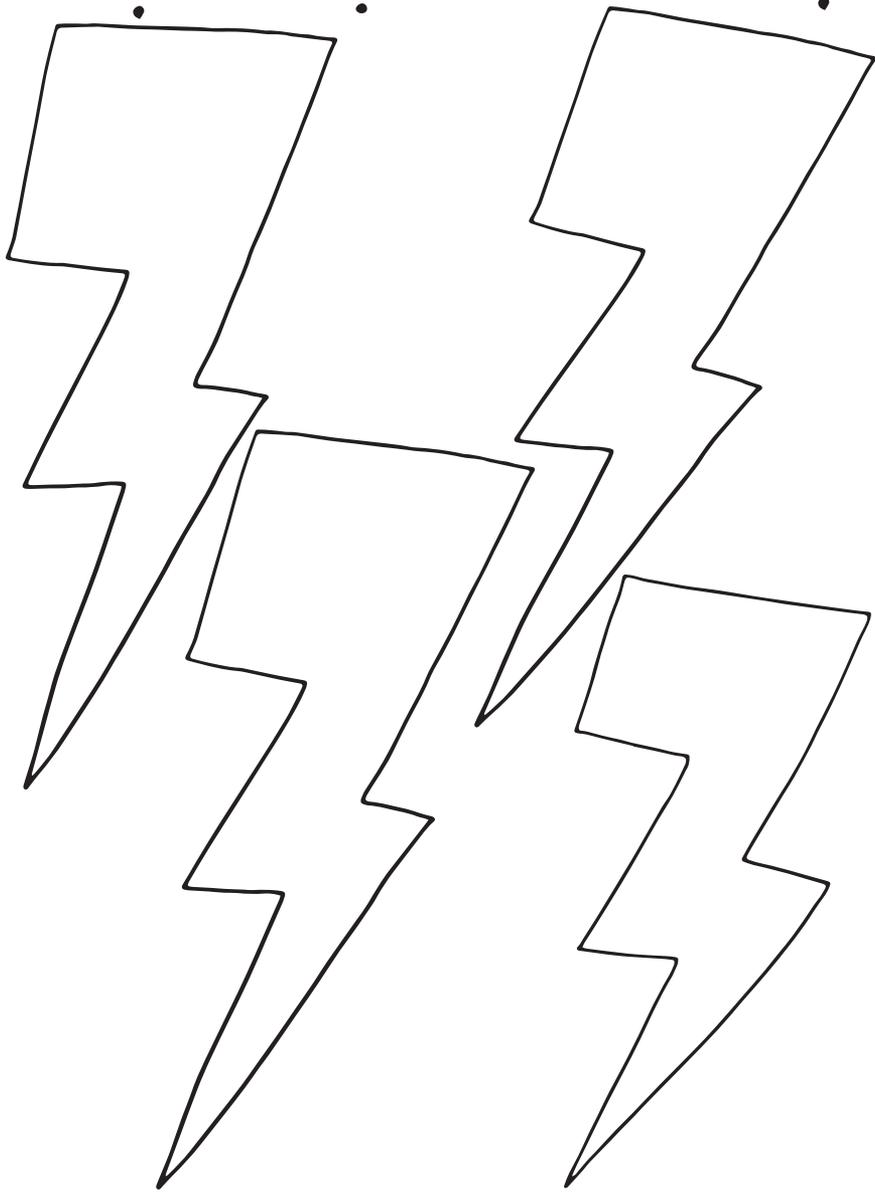
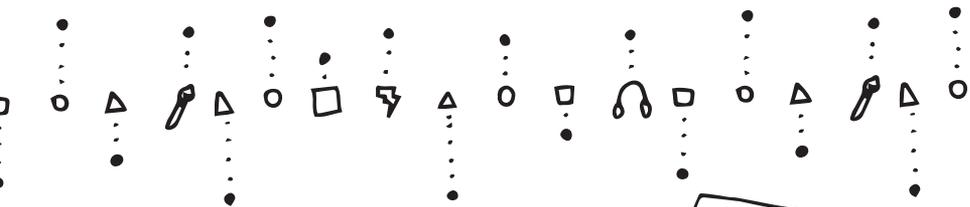
Can you get feedback from others about your music?

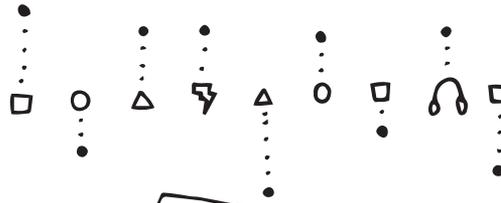
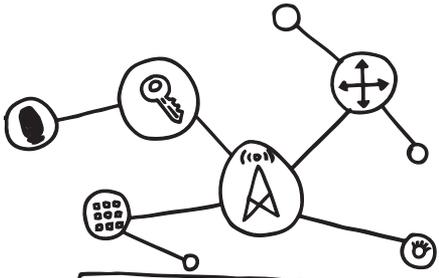
How does energy move?

How does energy move through earth, water, sky, and community?

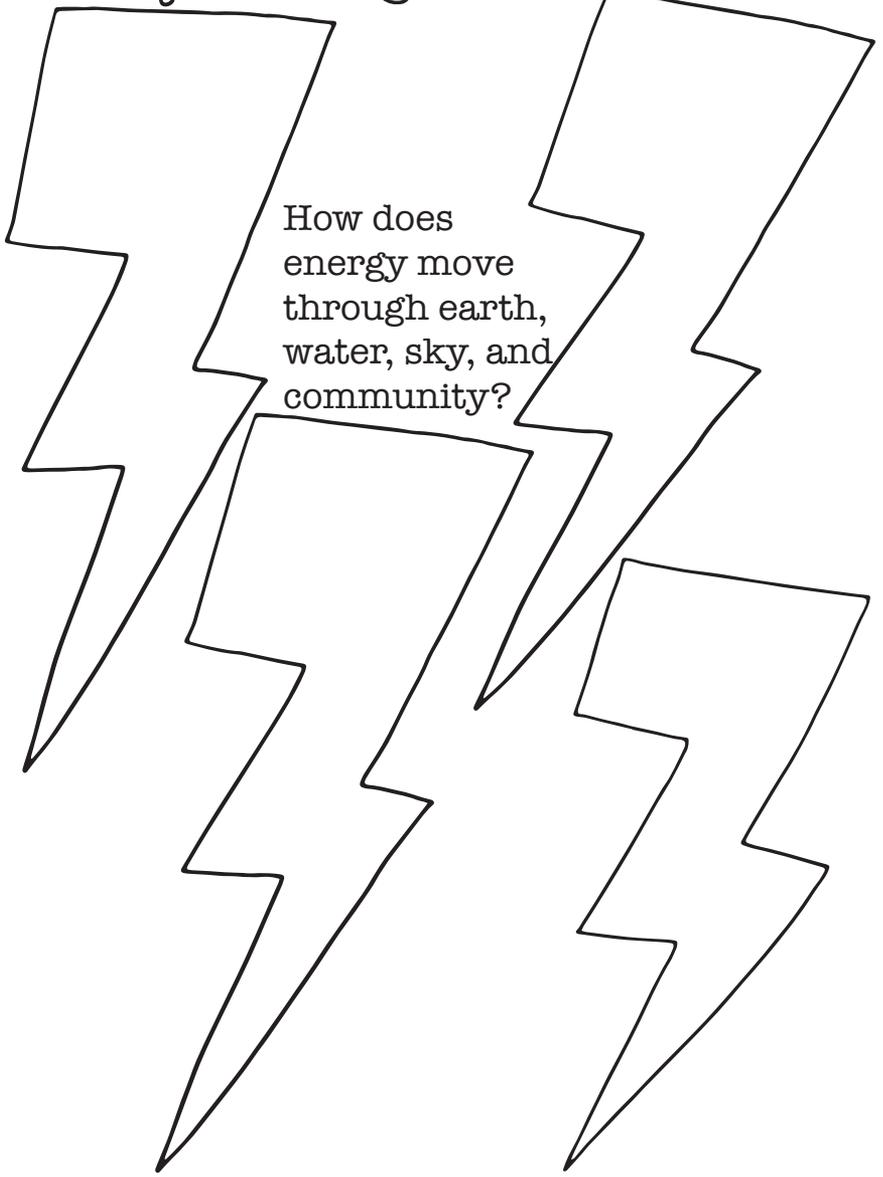
How can you connect to a movement larger than yourself?

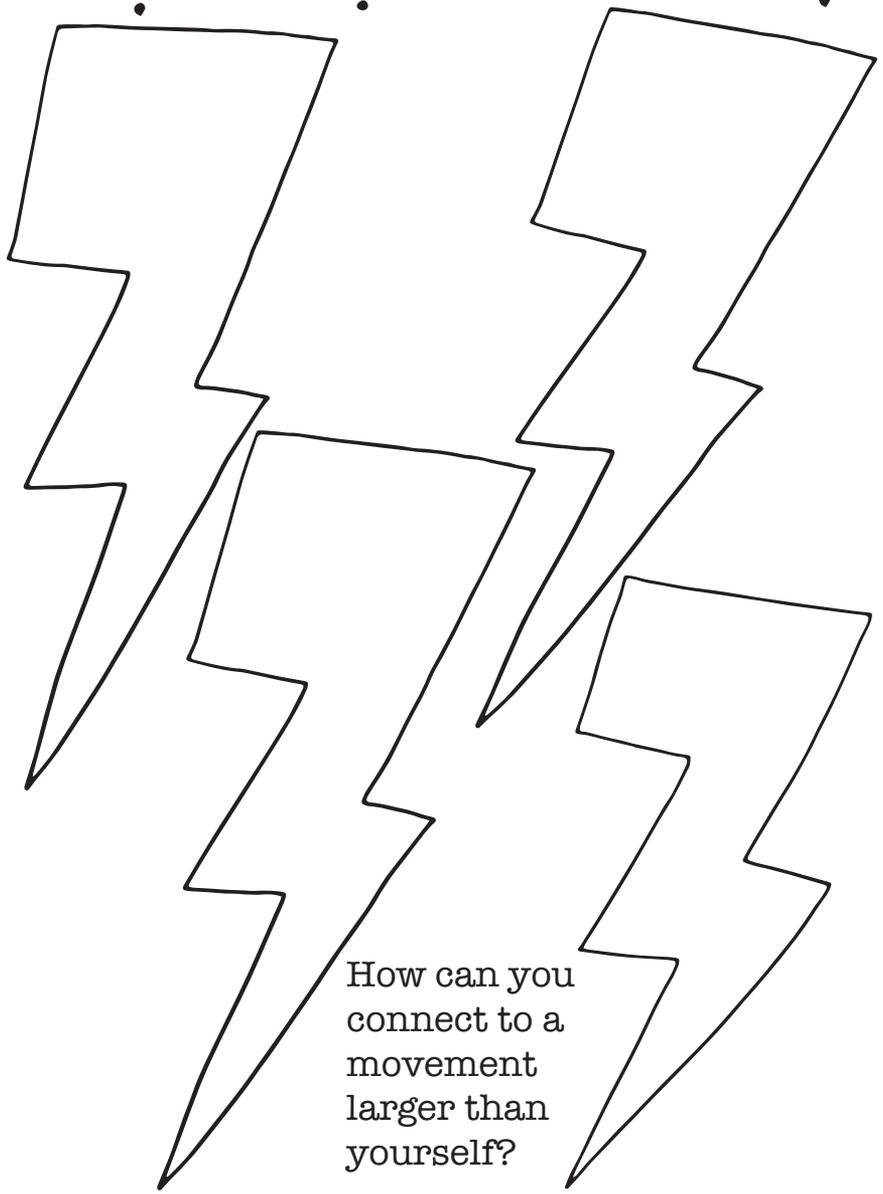
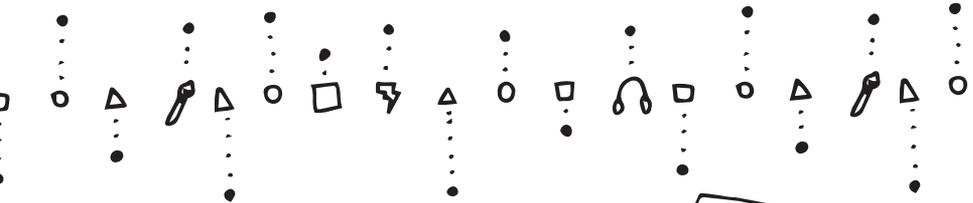




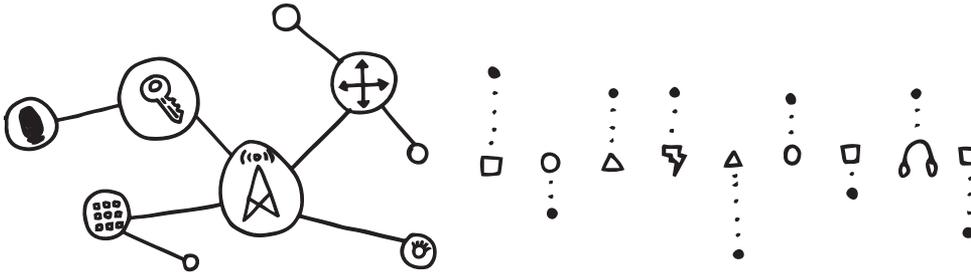


How does energy move through earth, water, sky, and community?

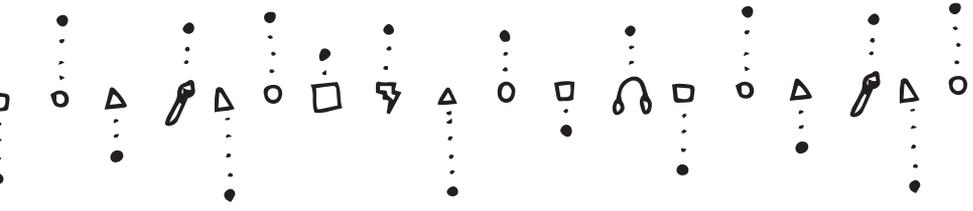




How can you connect to a movement larger than yourself?



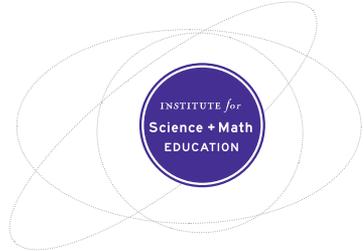
share something beautiful here



share appreciations for your family here.
in what ways did you help one another?

Explore technology with your family! Learn about circuitry, robotics, e-textiles, and programming together: use old and new technology to bring your stories to life.

This partnership between the University of Washington Bothell's OpenSTEM Research, UW Seattle Institute for Science + Math Education, Pacific Science Center, Red Eagle Soaring Native Youth Theatre and the Seattle Public Libraries has received a grant from the National Science Foundation for a three-year project called Backpacks for Science Learning. The project fosters opportunities for families to explore science and engineering together as they engage with robotics, computer science, and coding.



The Seattle Public Library

