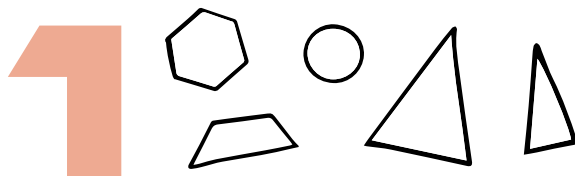


Finding Math

Go on a hunt to find shapes that are hiding in plain sight. Then, practice using only geometric shapes to create a collage based on one of your finds.

MATERIALS

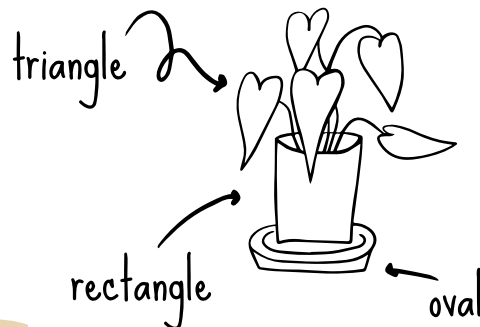
Shape Spotter: Paper towel tube
Shape Scape: Paper, pencil, crayons or markers, scissors, glue



1 Hunt for shapes!

Look for shapes at home or in your neighborhood.

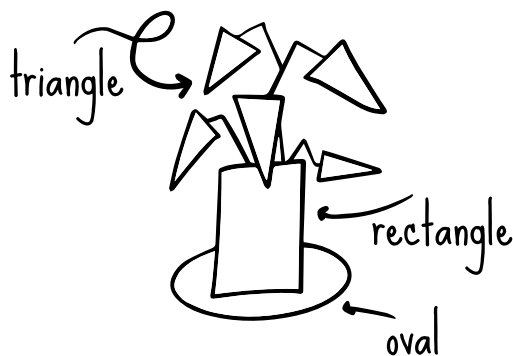
Try using a paper towel tube as your spotter. A narrow view makes it easier to see one shape at a time. Use the chart on page two to keep track of your finds.



2 Pick an object

Choose something you spotted in your shape hunt.

Look closely - what other shapes do you see? Try to find as many geometric shapes in the object as you can.

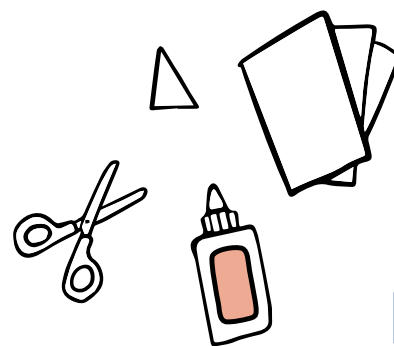


3 Draw your scape

Draw your object using only geometric shapes. You will have to make some tough choices!

Identifying the most basic shapes or units that make up an object is called abstraction.

Breaking something down into smaller parts or steps is an important skill in art and math alike!



4

Collage it!

Once you have your sketch, turn it into a collage!

Cut or rip paper into the shapes that you used in your sketch.

Paste them on top of your drawing, or on a new sheet of paper, to create a geometric collage.

Shape Scapes!

Finding Math

Use this chart to keep track of the shapes you find. How many of each can you find?

circle 	
oval 	
triangle 	
square 	
rectangle 	
parallelogram 	
trapezoid 	
pentagon 	
hexagon 	
octagon 	

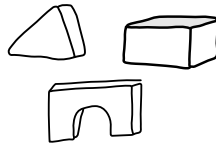
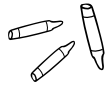
Finding Math

In this activity, practice counting, comparing quantities, and learning to identify the number of a small group of objects without counting each one!

MATERIALS

- Objects you find around your home
- Something to draw with

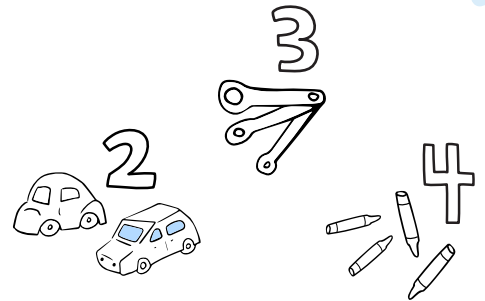
1



Find three

First, look for three similar small objects, like three toy cars, or three spoons. Put them on the floor or table. Next, find three of something else, a little bigger this time. Pile these next to your first finds. Finally, find three of something even bigger, like pillows.

Admire your three piles. Think about how many different ways "three" can look!



Find 1 - 10

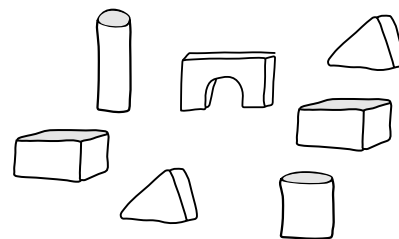
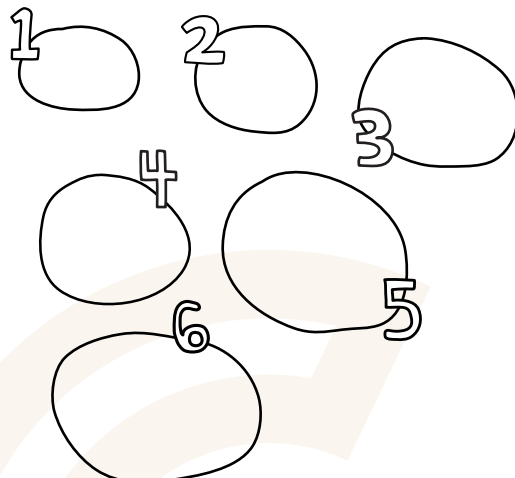
Now find one of something you can easily put in your hand. Place it on the table or floor. Next find two of something else, about the same size. Then three, then four, and so on until you find 10 of a tenth object.

As you learn to count, it helps to point to each object as you say the number.

Draw your finds

Use the chart on page two to draw your finds. What kind of objects did you find?

As you draw, think about how one object looks compared to three. Or how seven looks compared to ten.



4

Make it a game

With your eyes closed, have a friend place a few objects in front of you. Then, open your eyes. Try to determine how many objects there are without counting each one.

Start with just a few, then increase the number. At some point, it will get too tricky! If there are too many, guess first, and then count. Switch back and forth, trading who gets to guess.

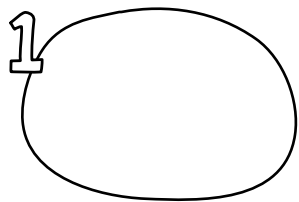
Hint: Try arranging the items in a pattern - like the pattern of 5 dots on dice! Does this help?

How Many?

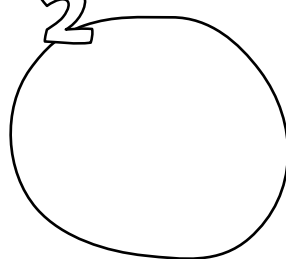
Finding Math

Use this page to draw your finds. What did you find one of?
What did you find ten of?

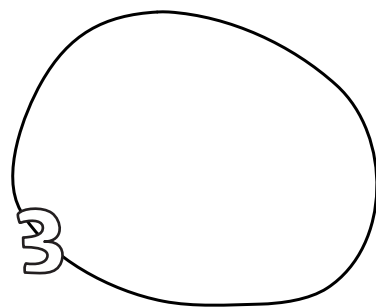
1



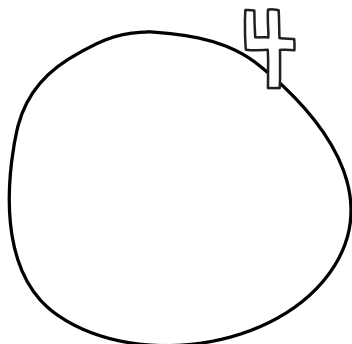
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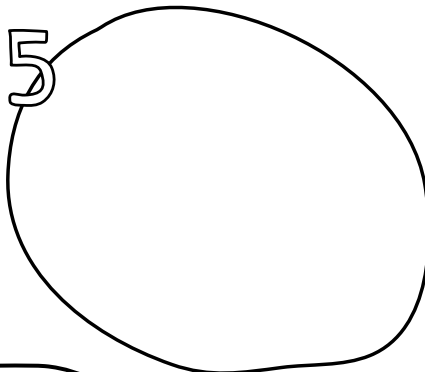
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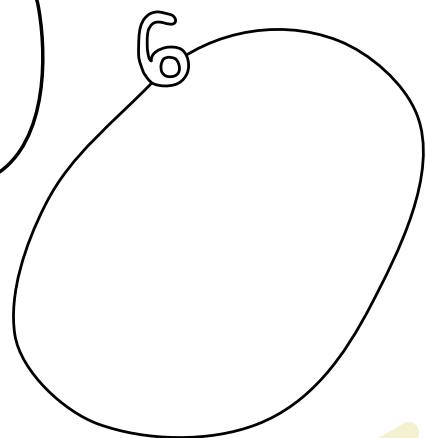
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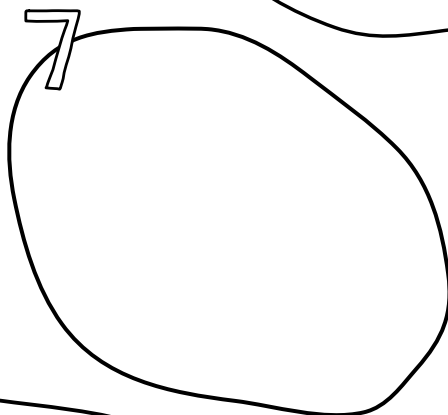
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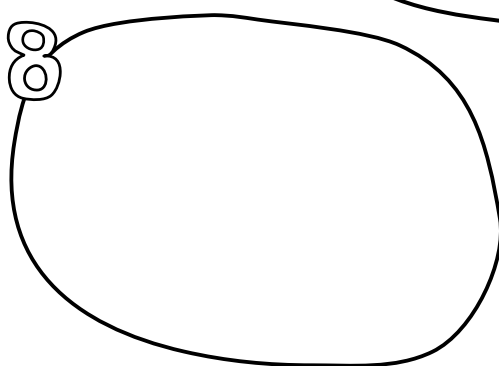
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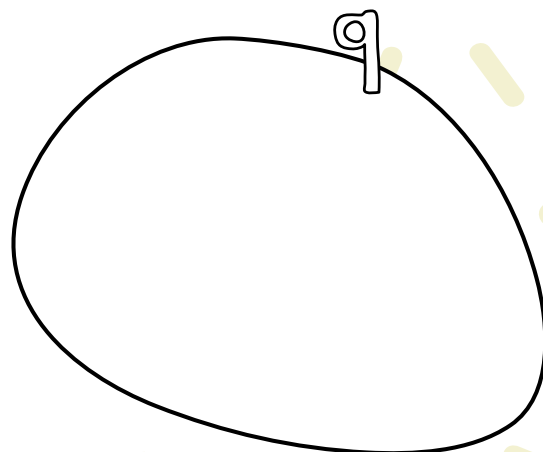
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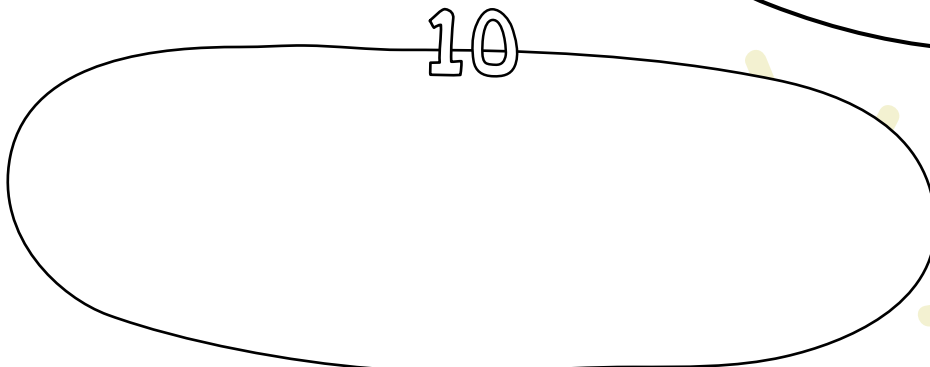
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9



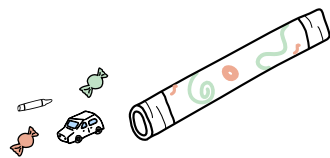
10



Finding Math

Make and hide a treasure for someone you love! Along the way practice counting, using positional words like below and behind, and map making!

1



Treasure Tube

Start with a cardboard tube. Use tape to close one end. Next, fill your tube with small treasures: a secret message, a picture, candy, a small toy, crayons or stickers - whatever you have! Chat about the size, shape and number of treasures that fit in the tube!

Once the tube is full, seal the open end with tape. If you want, decorate or wrap it in paper.

MATERIALS

- Cardboard tube
- Tape
- Small "treasures" you already have to fill the tube: stickers, candy, small toys, crayons, etc
- Something to draw with



2

Hide It!

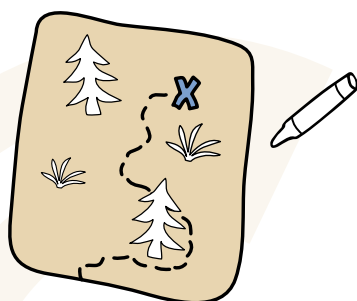
Next, find a good place to hide your tube. Talk about where you are going to hide it. Are you going to hide it under something? On top, behind or next to? Using these "positional words" boosts early math skills.

3

Draw a Map

If you want, make a map to help your friend find the hidden treasure. Your map can be as detailed or vague as you want. Maybe you draw a path through the rooms in your home, or to a spot in the yard or park. Things to think about:

- What do you need to put on your map to help your friend?
- How will they know where to start?
- Are you using symbols? How will your friend know what the symbols mean?



4

Go on a Hunt!

Deliver your treasure map to your friend, or tell them there is treasure to find!

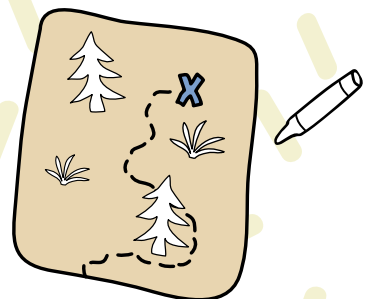
As they search for the treasure, help guide them. You can use "warmer" and "cooler" to let them know when they are getting close, or farther away. You can also help guide them by using positional words "you need to go through a door" or "walk behind a tree!"

Happy hunting!

Hidden Treasure!

Finding Math

Use this page to draw a treasure map!



Finding Math

Use plants to create a beautiful piece of art! Observe patterns and textures in nature. Then use the plants you collect to create your own patterns and textures!

MATERIALS

- Collected plants and other natural items to paint and make marks with
- Craft paint, like tempera
- paint brush (optional)
- Large piece of paper

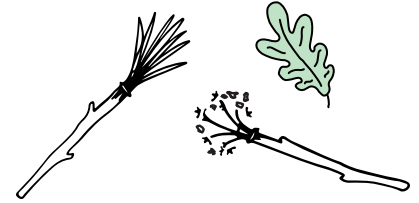
1



Collect some plants

In a yard or local park, collect flowers, leaves, moss, sticks, and bark to make your painting. As you collect, talk about the patterns, textures and colors you see. What do you notice about this flower? How many petals does it have?

If you want, use the next page as a nature journal to draw your finds and write down your observations about each one.



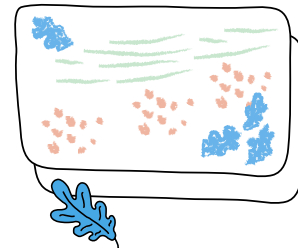
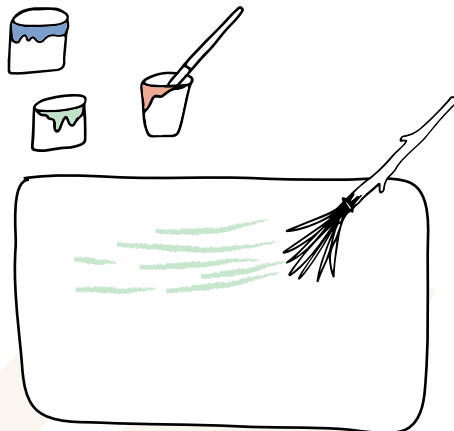
Prep the plants

Next, set all your plants out on a table and think about how you will use them to paint. Can you dip or brush paint onto one to use as a stamp? Try creating your own set of brushes by bundling a handful of grass, leaves or seedpods together and using a rubber band to attach them to the end of a stick. What else can you think of?

2

Time to Paint!

Set out some containers with different colors of paint and a big piece of paper. Use your plants to make as many different kinds of marks as you can think of. How do the marks change as you paint fast or slow? Use more or less pressure?



4

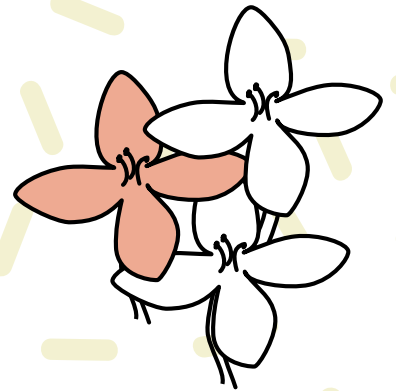
Spot the Patterns

As you admire your work, what do you see? Did you create any patterns? What kind of marks did the different plants make? Which mark is your favorite? If you want, add your notes to your nature journal.

Plant Patterns

Finding Math

What do you notice about the plants you are collecting? Use this page to draw your finds and write down any observations.



Finding Math

Use household items to build a shelter for your favorite toy! Practice problem-solving skills while you plan and build. Then, use shapes to draw your finished design!

1

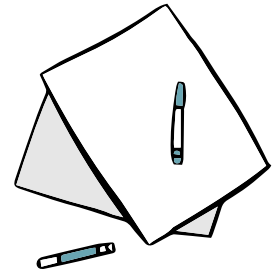


Choose Your Toy

Before you start building, choose your toy! Choosing your toy will help you make important decisions about your shelter. Is your toy small? Medium? Large? What kind of building materials will you need to make a shelter large enough for your toy?

MATERIALS

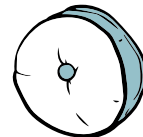
- Your favorite toy
- Building materials, like cardboard, paper tubes, blocks, pillows, and blankets!
- Accessories to decorate your shelter, like artwork or a comfy spot to sit.



2 Make a Building Plan

Now that you've chosen your toy, make a building plan! What kind of shelter do you think your favorite toy would like to live in? How many stories will it have?

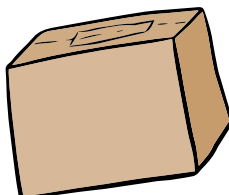
How will you decorate? Do your building materials allow you to add decorations with glue or tape, or will you use other items, like pillows, blankets, and other toys?



4

3 Build Your Shelter

It's time to build! Think about your building plan. What is the first step? Have you gathered your materials? Will your building have a foundation, or will you start on the walls? As you build, you may have to adjust your plan. You could have new ideas to incorporate!



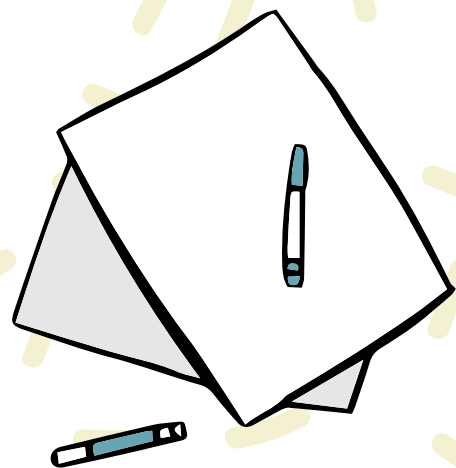
Finishing Touches

You've finished your shelter! Now it's time to decorate. Imagine what your toy might enjoy in the shelter. A bed? Some artwork? A telescope? A snack? Will your decorations fit inside? When your finished draw your final creation!

Raise the Roof!

Finding Math

Use this page to make a building plan for your shelter. How much space will you need for your construction? What materials will you need to gather? What steps will you take?



Raise the Roof!

Finding Math

Use this page to draw your final creation! What shapes do you see?



Finding Math

Build a ramp and watch your toys race! Practice making predictions - what toy will win? How fast will it go? Then, time your toys!

MATERIALS

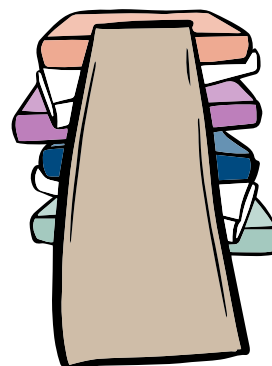
- Something to lean your ramp on
- Long, flat object to use as your ramp
- Toys to "race"
- Timer, watch, or clock (optional)

1

Build Your Ramp

First, make a base for your ramp. Use something tall, like a table, chair, or bathtub. Or, build your own! Try using a stack of books, a cardboard box, or anything else you can dream up.

Then, choose a long, flat object to use as your ramp, like a cookie sheet, plank of wood, or piece of cardboard. Lean it up against your base. Now you have a ramp!



2

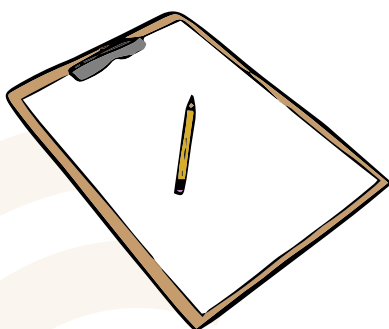
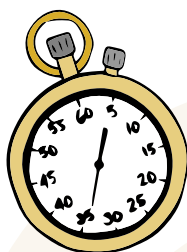
Test it Out

Next, choose some toys to race down your ramp. Make predictions. What toys do you think will go the fastest? The slowest? Why? Then, do a few trial runs. Does your ramp hold up? You may need to make some changes so your ramp is more stable.

Ready, Set, Go

Time to race! Place your toy at the top of the ramp and let it slide down. As it moves, use a clock, a stopwatch, or count aloud. How long does it take to reach the bottom? Record your results. Now, try a different toy. How does this toy compare to the first? Is it faster, slower, or about the same?

If your ramp is wide enough, try racing your toys at the same time! Which finishes first?



4

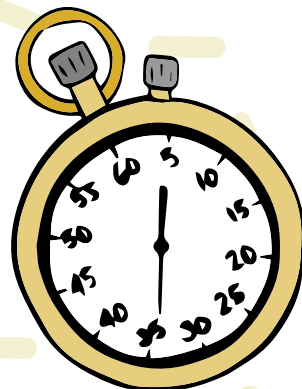
Modify Your Design

What happens when you change your ramp design? Try making it taller or shorter, wider or narrower, steeper or flatter. Use a different material or add guard rails. Now, race your toys again. Record your results.

Ramp Race!

Finding Math

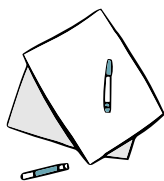
Use this page to record your findings. How fast did your toys travel down your ramp? Which toy was the fastest? Which was the slowest?



Finding Math

Listen to different kinds of music and draw what you feel! Use different colors and drawing tools to explore different beats, rhythms, and patterns while practicing fine motor skills.

1



Set the Stage

Find a quiet, comfortable place to draw. Make sure you have a flat surface for your drawing paper, and enough space for your body and your drawing tools! Then, set up your music player. You may want to create a playlist of songs, or just tune into the radio. Adjust the volume so it is just right!

MATERIALS

- Paper
- Your favorite drawing tools
- Music player

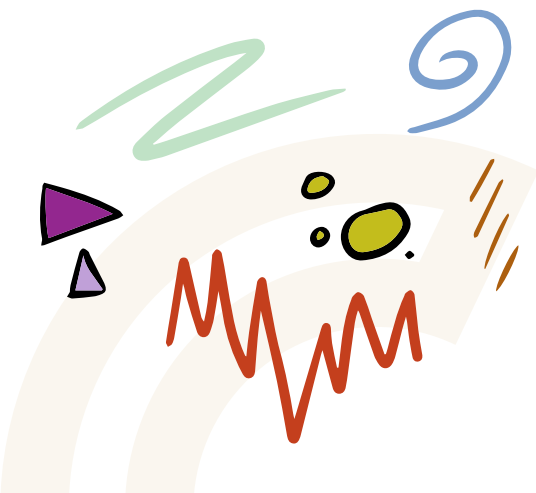


3

Mix Tape

Now that you've got a feel for the music, you're ready to draw! What sorts of lines, shapes, or colors does the music remind you of? How hard do you want to press down as you mark the page?

Try listening to different genres of music! When the song changes, how does your drawing change?



2 Feel the Beat

Turn on your music device and listen closely. You may even want to close your eyes! How does the music make you feel? Happy? Sad? Mad?

Can you find the beat? If you're having trouble, try clapping! Is the beat fast, slow, or somewhere inbetween?



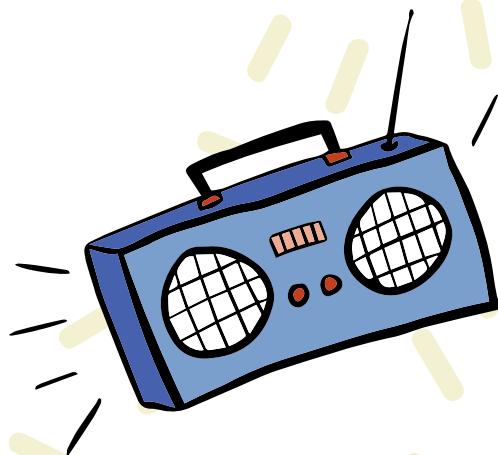
4

What Do You See?

When the music stops, take a look at your drawings. Do you see any patterns emerge? Did you use the same lines, shapes, and colors for each song, or were they different? How? Think about how each song made you feel. What did your drawings look like when the song made you feel excited? Calm? Curious? Sad?

Finding Math

Use this page to draw while you listen. Can you name the feelings you had for each song? If you can, record them next to each drawing!



Finding Math

Use this page to draw while you listen. Can you name the feelings you had for each song? If you can, record them next to each drawing!



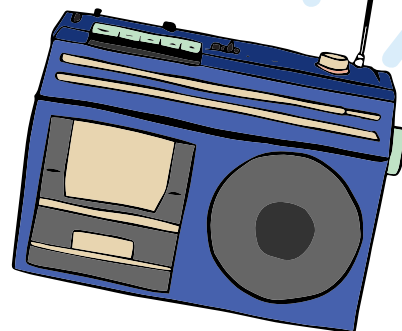
Finding Math

With a partner, take turns creating a new dance to your favorite song! Use big body movements to explore rhythm, pattern, shape, and turn taking.

MATERIALS

- Space to move
- Music player

1



Room to Groove

Find an open area in your home or outside that has lots of space for your dance moves. If you need to, you can temporarily push large objects like furniture out of the way.

Safety first! Be mindful of anything that has sharp corners or edges, rugs or carpets that might slide around, or items that are breakable.

3

Your Move

Now that you've got a feel for the music, start choreographing your dance. You can do this on your own, or with a partner. If you have a partner, take turns. Experiment with different patterns and shapes! For example, you might suggest three claps, then your partner might make two arm circles.

You may not always have the same ideas, but that's ok! Compromise is an important part of making art together.



2

Find a Rhythm

Pick a song to dance to! It should be something you enjoy that you don't mind listening to over and over again while you practice.

Once you have your song, close your eyes and listen to the rhythm. What parts of your body want to move? Arms? Legs? Hips? Head? How do they want to move? Fast or slow? Big or small movements?



4

Dance Lessons

When you've finalized your dance, teach someone else! Try showing them step by step. When they have the first move down, move on to the next. Teaching things to others helps reinforce those same movements and ideas in our own brains!

Just Dance

Finding Math

Use this page to keep track of your dance moves. What move is first, and what comes next?

