



Drawing from Observation requires the artist to look closely and examine something with curiosity. Making decisions about which lines and shapes and details to record develops visual awareness. When given frequent opportunities to draw, a student develops skills and confidence. Drawing can become an approach to teaching and learning. This lesson is one example of this strategy.



Push and Pull

Kindergarten • 50 min

Learning Goals

DRAWING:

Drawing from Observation Practice

SCIENCE:

Force and Motion: pushes and pulls can have different forces and directions

Science Notebook, sketching and note taking

Materials

KIT INCLUDES:

- Lesson Plan with [drawing demo](#)
- 15 Push/Pull art images
- 1 large art image
- Sample of teacher demo drawing (truck)
- Bag of Push/Pull items for drawing
- Green colored pencils

MATERIALS NEEDED:

- Drawing paper (2-3 pieces per student) with a hard surface like a clipboard or small white board. OR sketchbooks
- Pencils with erasers
- Large item that rolls (a large truck, the simpler in shape the better)
- 12x18" drawing paper and sharpie for teacher demo drawing
- Other items that push or pull

Set up/Prep:

- Set 7-10 small push/pull items on students' tables. Collect a few from the classroom to add.
- Drawing cycle poster displayed
- Drawing music cued
- Prepare for introduction and demonstration (*Watch the demo video.* Practice drawing the large truck or item you have collected to pass around the circle.)
- Sketch books or paper and clip boards, and pencils gathered and placed near you in the circle.

Lesson Steps:

1. Making Personal Connections: (15 min.)

Gather students in a circle on the floor. Seat a child or adult next to you who can be your partner to demonstrate push and pull activity.

Today we're going to make some drawings that will help us think about the way things work. All of us have "force" inside of us. We can make things move with our force! ____ is going to be my partner.

Watch us and see if you can figure out how we are making each other move.

Face your partner, knee to knee. Place your hands up, palms flat and ask your partner to match you and place their flat palms on yours. Tell them that you are going to make them move first, then they can use their force to make you move. Gently push your partner so they are leaning back and then let them push you back. Do this a few times, back and forth.

How are we making each other move? Yes, pushing! Help us by saying "Push, push, push..."

Engage the class in chanting, slowly, while you and your partner take turns pushing each other back and forth.

We can use a very small amount of force and barely move each other. Help us by using a tiny voice "push, push, push! We can use a bigger force and move each other more, let's use a deeper, bigger voice and move each other more...Push, push push! Now see if you can figure out the new way we are making each other move. One partner places their hand face up, the other face down, and we hold each other wrists.

Model pulling each other back and forth and let the students observe that this time you are "pulling." Model the small pulls with small voices, chanting, and the larger pulls with more force. Ask your partner,

"Even though sometimes I was using a lot of force, did you feel like I was still being gentle?" (yes!)

I'm going to match all of you up with a partner and you can try this too. The first way you are going to move each other is by using your flat hands and pushing. As soon as I match you up you can begin. We'll push *together* while we say the words, push, push, push....

Match students up with a partner next to them. Be sure students are using flat hands, not gripping with their fingers. Help class chant with small voice and larger voices to experience the feeling of less force and more force.

Here come the last five pushes, 5,4,3,2,1. Now we're going to switch to pulling, one partner places



their hands face up, the other face down and hold each others wrists.

Facilitate this experience in the same manner as the pushes.

Display the large art image of the child pulling a seal.

We're going to play an activity called "Pass the Picture." You're going to have a picture to look at and you and your partner will answer these questions: Are they pushing or pulling and which way is it going? Let's try that with this picture. (Refer to larger print of the child pulling the seal.) Is this person pushing or pulling? What do you see that makes you say that? Show which way they are moving by pointing with your finger. I'll be bringing you and your partner a picture. As I come around the circle, point to the place on the floor where both of you can see the picture, the pictures will stay on the floor. As soon as you get your picture you can start talking with your partner. I'll give you the signal to wrap up your conversation by saying "10 seconds, then you'll hear the countdown 5,4,3,2,1 zero voices. When you hear this countdown, end your conversation and be ready to hear what will happen next when I get to zero voice.

Remember, are they pushing or pulling? And which is it going?

Go around the circle and set a push/pull art image in front of each pair of students. Give them about 20-30 seconds to talk about the picture, moving around the circle and listening in to conversations. Give them the 10 seconds and the countdown from 5.

Now we're going to pass the picture to our right. Your team will pass to this team...(quickly give each pair of students instructions on who they will pass to.) Point to the people you will pass to. Ready? "Pass the picture." Are they pushing or pulling and which way is it going? You can also decide if it looks easy or hard? Are they using a little force or a lot of force?

Pass two or three more pictures after this then have students move pictures to center of the circle and collect them.



Bring the large truck (or other object you've collected) into the circle.

We are all going to use our force to move this truck around the circle. When it gets to you, place your hands on it and keep it moving. As you touch it, be thinking about whether you are pushing or pulling. Watch others moving it and think about whether they look like they are pushing or pulling. We're going to make sure everyone has a chance to help.

Facilitate moving the truck around the circle with each child placing their hand on it and moving it to the next child.

Were you pushing or pulling? Acknowledge that it was a little of both. Was it easy or hard? It's a heavy truck! What made it easy? (the wheels!) That's right! When people make things that are going to move, they often add parts, like wheels, to make them easier to move. Today we are going to study many things that move by pushing or pulling. We're going to look closely at them to figure out how they work. Taking time to draw them will help us look closely and also show others how they work. Let's start by drawing the truck. I'll model for you how I can look at it and draw what I see, then you can make a drawing of it too.



2. Teacher Demonstration. (10 min) [Demo video](#)

Place the large piece of drawing paper on a hard surface on the floor, with the truck still in the middle of the circle for your drawing demonstration. Invite students to get up on their knees if they can't see your drawing paper. Model using the drawing cycle (referring to the poster.)

First I observe the truck. I see a front and a back of the truck. I see wheels, here, here and here...

Next I plan where I'm going to start. I think I'll start at the back of the truck. The back is kind of like a square but more like a ____ (involve students.) My plan is to start drawing right at this corner.

Next I'll practice by drawing the shape in the air with my finger, first. Hold your finger up and you can practice with me.

Trace the shape of the back of the truck in the air. **Now I'll draw.** Model drawing the back of the truck. **Next I think I'll draw the wheels...**(Continue on, modeling the drawing of the truck part by part. Keep it simple but emphasize that you are looking at the truck and drawing what you see.)

Pass the paper and clipboards or sketchbooks around and drawing pencils. You will want to help students who are sitting with an awkward view of the truck to move where they have a better angle. Invite students to plan where to start, practice drawing the first shape in the air, then draw. Play the drawing music to help them work quietly.

If you are finishing up, look closely, what else do you notice? What could you add to your drawing?

As students are finishing up, draw their attention to your truck drawing. (To assist you in knowing how to instruct this, see the sample teacher demo truck drawing in the kit.)

I am going to add some instructions to my drawing, with this green pencil, to show how a person would make it move. They would put their force here, and I'm going to show that by putting a green dot where they would put their hand. Then I'm going to make an arrow to show which way it could move. Now, as a final challenge, you could write a word. "push" or "pull" to your instructions. (Write these words on the board so they can see spelling.)

Pass out the green pencils to students who are still on the floor drawing the truck. When they are finished adding their green "instructions" to their truck drawings, instruct them to flip to the next page in their sketchbook (or to the next sheet of paper on their clipboard) and take their green pencil and regular pencil with them to the tables to draw items in the same manor, adding the instructions with the green pencil. Coach students by helping them examine how objects work, set it where they can see it easily and follow the drawing cycle to draw it carefully.

3. Students Draw: (15-20 min.)

Dismiss students to go to tables and start sketching push/pull items. Turn on drawing music to keep voices low. (During this drawing experience it's almost impossible for students to be completely quiet because they are making the items "work." Helping them focus on and draw one object creates a quieter atmosphere where all can work.)

4. Reflections: (10 min.)

Students bring sketchbooks to class circle on the floor. Assign students a "talking partner" next to them.

Share with your partner what you drew and show them the instructions on how to make it work. Do you push or pull, or both?

Extensions:

Have objects at a center for continued experience with these drawings.

