

SCHOOL AGE

Week

19

Smart Activities



SMART CHOICE. SMARTER CHILD.®

Time for Improv

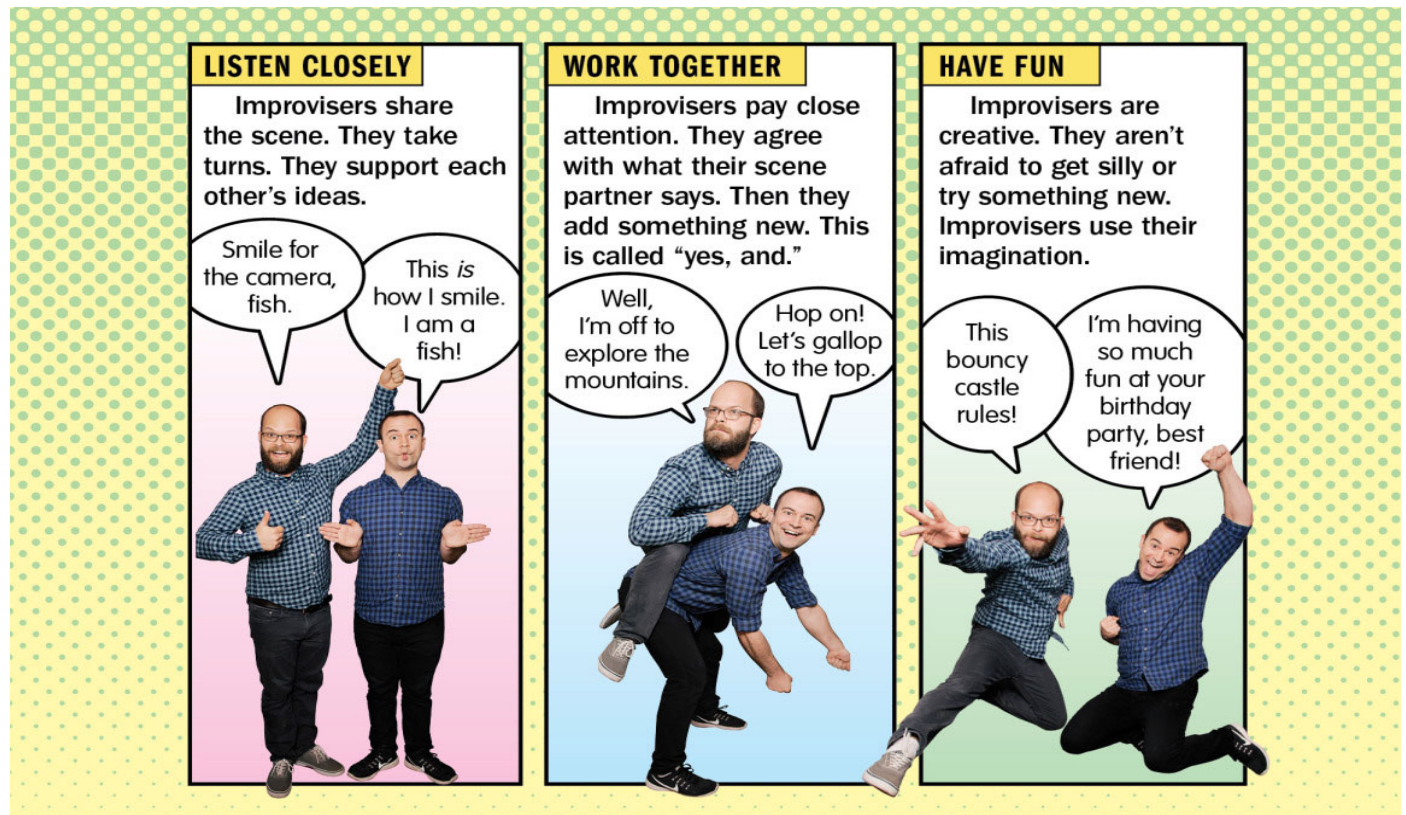
Materials: You will need another person or a group to make improv theater work.

Instructions:

Improv stands for Improvisation. It's a type of theater acting. An improv performance is made up on the spot! There are no scripts or rehearsals, and the improv session is never performed the same way twice. Each improv is completely extemporaneous (spur of the moment). Improvisers come up with their lines as they go. They do not know what will happen next as they bounce conversation among the improv group. They discover what happens as it happens?

Now grab a partner or a group and let your imaginative conversation fly!

1. Get your partner or group and invent a scene idea for your improv conversation.
2. Take turns with speaking.
3. Support or add to each other's conversation.
4. Improvisers pay close attention to their partners words. You should start by agreeing with what one partner says and add something new to the scene.
5. Be creative with your improv and don't be afraid of being silly – just use your imagination and let the conversation flow!





Build a Go-Cart

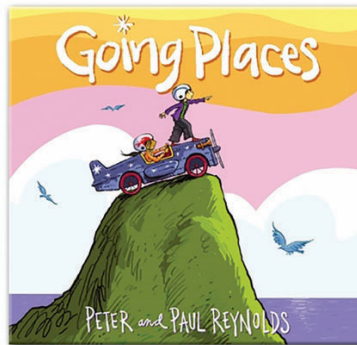
Materials: odds and ends (washed plastic containers, paper towel tubes, cardboard, etc), scissors, tape, glue

Preparation: Reading the book is a plus but this short synopsis will give you everything you need for the **Challenge** EXCEPT the joy of the story and seeing the great illustrations.

Instructions:

This book can inspire you to make your own **STEAM** creation! This story brings to life ways to follow your own path in creating something new and fun from bits of odds and ends around the house.

Going Places by Peter H. Reynolds and Paul A. Reynolds



Rafael and his friends receive identical go-cart kits in class. Rafael excitedly follows the directions to build his craft. Meanwhile, his friend, Maya, decides to make her own directions and create something unique to enter into the class go-cart race.

CHALLENGE

1. Use a small motor and an AA battery pack with wire tips prestripped. (You can get one on online or at a craft/hardware store.) The batteries can be connected to your motor with tape/hot glue.
2. Use a collection of recycled materials—for example, washed plastic containers, paper towel tubes, cardboard along with scissors, tape, and glue.
3. The goal is to create a recycled sculpture that will vibrate and move with the help of your motor.
4. Good luck and happy motoring!

Is Pikachu Real?!

Materials: paper/pencil, internet access, website: <https://www.youtube.com/watch?v=gaOpYgmbMwI>

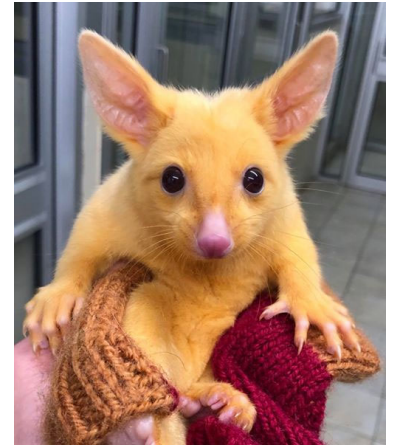
Preparation: Define Gene: genes carry the DNA information that determines physical traits (like eye color) from parent to child.

Instructions:

According to the Boronia Veterinary Clinic and Animal Hospital in Melbourne, this is a rare Golden Variety of the Common Brushtail Possum in Australia. Her golden color is due to a genetic mutation, or change in her genes, that caused a low level of melanin pigment in its skin and fur.

Listen to the video below and write down some nets using the questions:

- How did this possum get rescued?
- What makes the Golden Possum so rare?
- What is the danger for the Golden Possum out in the wild?



More information about Golden Possum:

<https://www.australiangeographic.com.au/topics/wildlife/2017/08/what-gives-golden-possums-their-colour/>

More information about genes: <https://kids.kiddle.co/Gene>

Image from: <https://www.facebook.com/boroniavetclinic/posts/2208445435886104>

My Unreal Animal

Materials: art materials, internet access, website: <https://kids.nationalgeographic.com/animals/>

Instructions:

Use what you learned about the Golden Possum to create a genetically modified animal of your own!

1. Go to the website above.
2. Choose an animal type: mammals, birds, reptiles, amphibians, invertebrates, fish
3. Choose a specific animal to learn more about its traits.
4. Create a new version of the animal that has traits that are somehow altered, and it must be protected from its environment (like a hedgehog covered in puffballs rather than prickly spines).
5. Use your imagination! Make a drawing, a 3D sculpture, write a story, act out a video, or think of another way to exhibit your creation.



Rhythm and Move Freeze Challenge: You Are What You Eat!

This activity is all about using dance to control your body and talk about healthy food you need every day.

Materials: scarves/bandanas/flowy fabric/streamers, Dance and Freeze Charts (included), dice, internet access, website: <https://hhph.org/resources/u-r-what-you-eat/> (listen for familiar pop-artists!)

Preparation: Get the whole family involved! Preview the dance chart and video tutorial. Make sure everyone is familiar with the dance movements and freeze poses.

Instructions:

One person will call out dance moves from the chart and control the music. All players have a scarf to dance with. When the music starts, players dance according to what was called out until the music stops. Then the players must listen to the freeze position that gets called out while the music is off. Take turns being the one who calls out the dance moves and controls the music. When the round is finished, name 10 healthy foods that help fuel the body.

Dance Moves for Kids Tutorial (Moon Walk, Running Man, Cabbage Patch):

<https://www.youtube.com/watch?v=OgDeUATS01s>

Other moves on chart:

Star Jump = Start with body low and jump into air stretching out arms and legs

Shoulder Shimmy = Rock shoulders and arms back and forth

Growing Up Strong = Melt down to the floor then stretch up very tall into superhero pose

Alternatives:

Use the dice to determine dance moves.

Jump and Freeze Brain Breaks: <https://www.youtube.com/watch?v=388Q44ReOWE>



Rhythm and Move Freeze Challenge – Dance Chart

Dance Moves	Freeze Position
Moon Walk	Stand on 1 foot with knee high. “One knee!”
Running Man	Put left hand on right knee and right hand on left knee “Both knees!”
Cabbage Patch	Put left hand behind neck to right shoulder and right hand behind back to left hip. “Left hand!”
Star Jump	Put right hand behind neck to left shoulder and left hand behind back to right hip “Right hand!”
Shoulder Shimmy	Cross both arms in front of chest while pushing chest out “Power attitude!”
Growing Up Strong	Both hands and feet on floor like a bridge “Bridge!”

Milk Plastic Science

An adult will help with this experiment.

Materials: paper towels, strainer, cookie cutter, spoon, 1 cup milk, 4 teaspoons white vinegar, art materials: paint, brushes, permanent markers, internet, website:

<https://www.youtube.com/watch?v=akhs3wcSDGA>

Preparation: Review the vocabulary words below:

Protein: a nutrient found in meat, milk, eggs, and beans that is made up of many amino acids and is essential for cells to grow

Casein: a white colored protein found in dairy and is used in making paint, plastic, and glue

Polymer: a form of molecules that is made up of very small molecules layered together in a pattern to create larger molecules

Instructions:

Think about this question: What do you think would happen if you mixed milk and vinegar?

Milk is a liquid that has fat, protein, and other nutrients. Vinegar is a fermented liquid that has acetic acid which makes it sour. This experiment uses the idea of mixing milk and vinegar to create plastic.

1. Pour vinegar into milk. Stir gently. It will be lumpy because protein does not mix with acid. The blobs are casein.
2. Pour the mixture into strainer on top of a bowl. Use a spatula or spoon to get all the mixture out. Let it drain several minutes.
3. Pour the contents of strainer onto paper towel and remove any excess liquid. This will make the plastic as strong as possible.
4. Transfer mixture onto dry paper towel. Squeeze into a ball. Press down to flatten.
5. Gently press cookie cutter onto mixture. Remove excess mixture and put back into mold to thicken the shape.
6. Create any holes for hanging the finished piece before the mixture dries by poking a hole all the way through.
7. Let the shape dry for two days to make sure it is completely dry.
8. Remove from cookie cutter. Decorate with paint and markers.

More to think about:

What other acidic liquids could you experiment with?

How do you think adding more or less vinegar would make the mixture different?

Do you think milk plastic is more or less biodegradable than man-made synthetic plastic?

See a museum of casein plastic items from 1933 here: <https://collection.maas.museum/object/228523>



Science: How do ships float?

Materials: internet access, website:

<https://www.youtube.com/watch?v=pnIIE1xD-yM>

Preparation: Preview video.

Instructions:

1. Watch the video linked above. Listen carefully as he discusses why ships float.
2. Listen for the following information:
 - What caused the first box to sink?
 - Why didn't the second box sink?
 - Who uses the same techniques as the second box?
 - Why do ships sink? Things sink if they are denser or less dense than water?
 - What are the walls in the box called?
 - If one compartment floods, can it still be repaired?
 - Why do some ships still sink?
 - What do naval architects have to think about when designing ships?



Continue your research on ships: find examples of ships that are built with compartments or "bulkheads" and examples of ships that are not.

Cooking: Baked Cinnamon Apples

***CAUTION:** Wash hands for 20 seconds before and after this activity.

Materials: apples, cinnamon, knife, baking sheet, parchment paper

Preparation: *Children will need help from adult for this activity.

Instructions:

1. With the help of an adult, place one rack on the top level of the oven and place the other rack on the bottom level of the oven. Pre-heat the oven to 200 degrees. Line baking sheet with parchment paper.
2. Wash the apples. With the help of an adult, core and slice the apples horizontally into 1/8-inch-thick round pieces.
3. Arrange your apple slices in a single layer on your parchment paper baking sheet.
4. Sprinkle your apple slices with cinnamon.
5. With the help of an adult, place your baking sheet in the oven on the top rack and set a timer for 1 hour.
6. Once the one hour is up, with the help of an adult, move the rack to the lower rack and bake for an additional hour.
7. When the time is up, have an adult take one apple slice out of the oven and leave it at room temperature for 2-3 minutes. If the apple becomes crisp, they are done. Turn off the oven and leave them in the oven for 45 minutes as the apples cool and crisp.
8. Now it's time to dive into eating these yummy and healthy chips! Enjoy with your family!



Popsicle Stick Boat Challenge

Materials: popsicle sticks, glue, straw, cardstock, large plastic container, water, paint and paintbrush (optional)

Preparation: Gather all your materials and set up a space to work.

Instructions:

1. Start by adding paint your popsicle sticks for color or make designs using markers on your popsicle sticks. The design of your boat is completely up to you! Allow time for your paint or marker designs to dry.
2. Once you have completed your popsicle stick color/design, you will put the base of your boat together. Line up six popsicle sticks in a tight row. Now, create some braces to hold your base of popsicle sticks together. Start by cutting two popsicle sticks in half. Glue three of those pieces along the top, center, and bottom of the boat base.
3. To make sure your popsicle stick boat is sturdy, add one more row of support on the bottom. Glue two full-sized popsicle sticks to the bottom of the boat on top of the three halves you just added. Allow time for these to dry.
4. Next, you will make the sail for your popsicle stick boat. Cut a straw in half. Then, cut out a triangle shape from a piece of cardstock paper. Punch holes in the top and bottom corner of the triangle using a hole punch. Design your sail using your creativity! Weave the straw in one hole and out the other.
5. Glue your Sail to the top of your boat base. (You can use hot glue gun here with the assistance of an adult. This will hold your sail up best.)
6. As you allow your boat time to dry, fill your plastic container with water.
7. Once your boat is ready, test it out! Does it float? Can you add small objects to your boat without it sinking? Test it out and see how well your boat holds up!



<https://www.theinspirationedit.com/preschool-boat-craft/>