



Ten Project-based

Learning Activities used in **Second Grade**

1. Be A Paleontologist

Materials

- Two chocolate chip cookies (not soft, ideally Chips Ahoy-Blue Bag)
- Two toothpicks

Mission

Extract as many fossils (chocolate chips) as you can by gently picking away at the dirt (cookie). How many fossils were you able to save? You may eat them when the project is complete!

For more information and activities with paleontology, visit this [website](#).

2. Create a Comic

Materials

- Paper
- Pencil

Mission

Think of a cartoon, show, or story that you enjoy and turn it into a comic strip! Remember to introduce the characters and setting at the beginning of the comic, and then show the problem and solution.

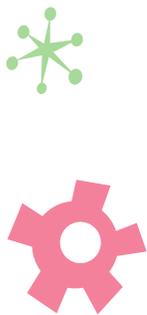


3. Create a Rainbow

Materials

- 3-4 cups of water (about 8 oz each)
- Paper towels
- Food coloring

Mission

1. Put a few drops of food coloring in each cup and mix until the water is one, solid color. Make sure to create at least the primary colors: red, yellow, and blue.
 2. Arrange the cups in a circle or in a line in rainbow order (red, orange, yellow, green, blue, violet).
 3. Fold up the paper towels multiple times so that they are skinny but thick. Put one end of the first paper towel in the red cup and the other end in the yellow cup. Repeat with the next paper towel being in the yellow and blue cup and the final paper towel being in the blue and red cup.
 4. Leave the project out for a few days and watch as the paper towels soak up the colored water, mixes with the color on the other end of the paper towel, and creates a beautiful rainbow!
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4. Help your Neighborhood

Materials

- Plastic bags

Mission

Walk around your neighborhood and pick up any litter you find.

Bonus:

Create a tally chart that shows and counts the type of litter you picked up (paper, plastic, glass, metal). Then, turn the tally chart into a bar graph showing the same information.



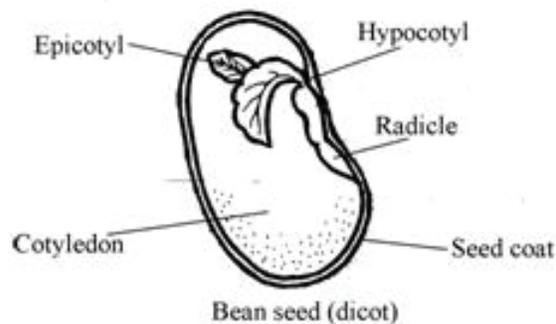
5. Dissect a Lima Bean

Materials

- Lima beans (or any other large seed)
- Water
- Magnifying glass

Mission

1. Soak a few Lima beans in water for at least three hours. The seeds will naturally start to split apart.
2. Carefully split the seed open and look for all the parts of the seed, using the diagram below.
3. Predict what part turns into the root, the stem, and the leaves



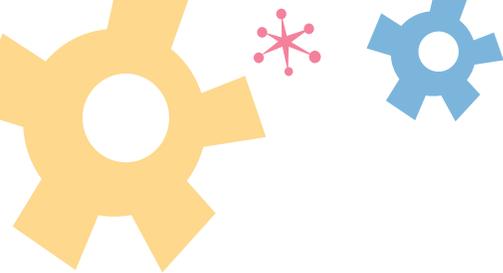
6. Plant a Lima Bean

Materials

- Cup
- Soil
- Lima bean (or other seed)
- Water
- Sunlight
- Optional: plastic wrap and rubber band

Mission

1. Add water to soil until the soil is thoroughly wet, but no standing water. Push the seed into the center of the soil in the cup and cover the seed with soil. Optional: place plastic wrap over the cup and put a rubber-band around the cup to keep the plastic wrap in place.
 2. Place the cup in a warm, sunny spot and observe the seed everyday. Once you see a sprout, take the plastic wrap off the cup and add water *as needed* to keep the soil moist.
 3. Observe the roots, stem, and leaves every day.
- Watch how they change! Can you believe the tiny parts of the seed turned into this plant!?



7. Create Your Own Zoo

Materials

- Stuffed animals or plastic animals
- Paper
- Pencil and markers

Mission

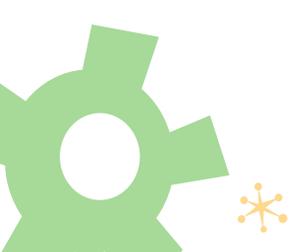
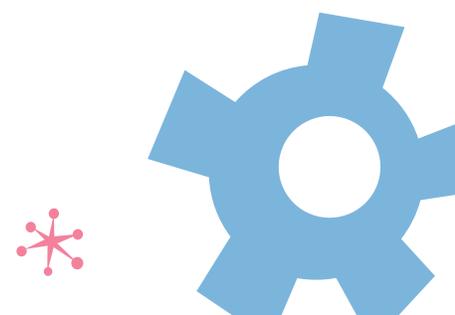
1. Choose at least 5 animals from your house and create a zoo for them. Decide how to organize the animals and give them all their own space.
 2. Create a habitat for each animal. Make sure that you know what sort of habitat each animal needs (jungle, savanna, prairie, forest, desert).
 3. Create a sign for each animal in your zoo. Make sure the sign tells the animal's name, diet (what they eat), area where they live, size, life span, and a fun fact about that animal.
 4. Display your zoo so that others can enjoy and learn about these animals as well!
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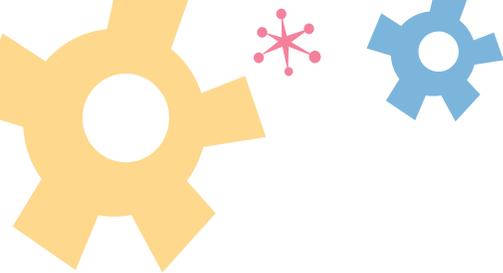
8. Measure and Graph

Materials

- Various items around your house
- Ruler or measuring tape

Mission

1. Find objects that are all different sizes.
 2. Measure those objects! Use inches or centimeters to measure the different objects.
 3. Turn the measurement information into a graph that shows all the measurements in one space.
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9. Design a Parachute

Materials

- Stuffed animal or toy
 - Various household materials
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Mission

1. Design a parachute that will keep your animal or toy safe when falling from a height. For help, think of the parachute pigs at the Playhouse! Remember you also need to securely attach the parachute to your animal or toy.
 2. If the parachute doesn't work, try to figure out why and make some changes to see if you can get it to work better. You can also switch to a smaller, lighter-weight toy. Keep making changes to make your parachute more successful!
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10. Create your own Terrarium

Mission

Watch this [video](#) with an adult to learn about the water cycle and how to build your own terrarium that will take care of itself!

