

# Off-Road Bins

## Description

Using plastic bins and flour as a base, create sensory bins for your child. As they explore the different textures and feelings of flour and other materials, your child will become more comfortable with using their fine motor skills.

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## Instructions

1. Gather your plastic bins and base material, such as flour or smooth pebbles. Fill each container a little less than  $\frac{1}{4}$  of the way full.
  2. Have your child select the toys they want to play with. The best toys for this activity are made of plastic or wood and feature wheels that spin freely.
  3. Once you're done with the prep work, it's time for some off-roading adventures! Place the container in front of your child and let them play. As they run the wheels through the different textures, ask your child to tell you what the material feels like.
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## Materials Needed

- [Shallow plastic bins](#) or totes
- [Toy trucks, cars, planes, or trains](#)
- A variety of household goods to make your "off-road terrain"
  - Flour, rice, sand, and smooth pebbles make great bases for your bins
  - Consider adding "obstacles" or areas of interest with shaving cream, play foam, or [glitter](#)

## Why is this a great thing to do?

These sensory bins promote fine motor skills, help your child adjust to different sensations, and practices their speech.

### Promotes fine motor skills.

These sensory bins allow your child to take the practice of their fine motor skills to the next level. By playing with toys within the container and feeling the textures with their fingers, your child will be practicing movements that will help them develop skills as they age.

### Introduces your child to sensations.

For many children, the feeling of different materials on their hands and fingers can take some getting used to. Encourage your child to talk about the different textures and sensations of the materials in their bins.

### Practices speech.

As your child discusses the differences in sensations and textures, they're practicing an essential part of speech by using different descriptive words. Additionally, learning how to describe feelings and sensations is an integral part of learning how to communicate.

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## Make STEM Connections

Help your child develop a more in-depth understanding that different properties are suited to different purposes.

### Try an absorbency experiment.

See which materials absorb water and which repel it with this simple yet [fun experiment](#).

### Sort your toys by properties.

Wood, plastic, metal, silicone, or cloth, what are your child's toys made of? Have your child sort their toys by color, size, soft, or hard. There are more unusual properties such as weight, the sound it makes, opacity, flexibility, and if it sinks or floats.

### Conduct a culinary experiment.

Prepare some foods with your child that are a variety of textures and hardnesses. For example, you might choose a dessert theme and discover that pudding is very soft, jello is a little soft, cupcakes are a bit harder, cookies are harder still, and jellybeans are crunchy on the outside but soft on the inside. You may want to select a single object such as a metal spoon to test each item against. You can also try things to draw attention to the properties of your food, such as occasionally serving monochromatic (or rainbow) meals!

## Next Generation Science Standards (NGSS) Correlation

### 2-PS1-1: Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

By using a variety of household items such as rice, pebbles, sand, flour, glitter, and shaving cream to line plastic bins with "off-road terrain," your child is exploring the characteristics of each material and developing an understanding of the classification of properties such as smooth, bumpy, powdery, and sandy. By sorting toys by color, size, softness or hardness, and more unusual properties like opacity, flexibility, or what sound the toy makes, your child is demonstrating the ability to use critical thinking skills to create new categories for classification. This activity can be extended by playing the board game, "Guess Who?" As you play the game, each player asks questions and eliminates characters until one character is left standing, and the player guesses which character it is. When the game is finished, discuss with your child how many ways the characters could be grouped or classified: red hair, no hair, glasses, facial hair, hat, gender, or skin color. Ask your child how many other categories they can create to classify the characters on the game board.

### 2-PS1-2: Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.

As your child runs a toy car through the bins with various "off-road terrain" substances lining the bottom, your child is observing which materials are appropriate for going faster, slower, stopping, or sticking. As you and your child prepare foods to test various textures, your child is developing an understanding of what ingredients are appropriate for making crunchy, jiggly, creamy, soft, or hard foods. This activity can be extended by completing a cut and paste worksheet to identify gasses, solids, and liquids.

## Talking Tips

"What does the flour feel like?"

"Do you hear the sound of the rice as it moves?"

"Are your hands sticky? Dry? Dirty?"

"Which bin do you like the most?"

## Tips & Extensions

Use your best judgment for what types of textures to introduce to your child. Avoid mixing too many materials at once or mixing competing textures. Flour with a glitter mountain makes sense; flour with a shaving cream river is a recipe for a "muddy" disaster.

Take pictures of your child as they play.

Great moments to capture include:

- The look on your child's face when they realize you're letting them get dirty for fun
- Your child's inner curiosity as they discover what different textures feel like on their hands and as they push their toys through them
- The moment when your child sets the toys aside to play with their hands instead

If you're using flour or similar material in your off-road bin, you can easily transition from this sensory activity into a quick art project. Provide a sheet of black construction paper and allow your child to roll their flour-covered toy wheels over the paper. Once the paper is covered with tire tracks to their satisfaction, seal over them with clear plastic tape!