# 1A. Shaker Sounds: Rice

## Where's the Math?

**Math vocabulary**

- Half
- Less
- More

**Math topic**

Measurement

- Measure capacity

## What to Use

**Per child**

- Clear container with secure lid
- 1/2 cup uncooked rice

**To share**

- Scoop for rice
- Funnel for rice
- 2-cup measuring cup
- Strong tape and scissors (for adult)

## What to Do

### ① Measure the rice

**Talk About**

**Easy.** Let's pour up to the 1/2 cup mark.

**Medium.** How can you tell that we poured 1/2 cup?

**Hard.** Measure out 1/2 cup yourself!


### ② Make a shaker

Pour the rice into a container.

Close the lid and tape for a firm seal.

### ③ Shake!

## Try this at home

**Loud and soft shakers.** Make one with pennies and one with pompoms. Compare the sounds.

# 1B. Shaker Sounds: Beans

## Where's the Math?

**Math vocabulary**

- Half
- Less
- More

**Math topic**

Measurement

- Measure capacity

## What to Use

**Per child**

- Clear container with secure lid
- 1/2 cup uncooked beans

**To share**

- Scoop for beans
- 2-cup measuring cup
- Funnel for beans
- Strong tape and scissors (for adult)

## What to do

### ① Measure the beans


**Talk About**

**Easy.** Let's pour up to the 1/2 cup mark.

**Medium.** How can you tell that we poured 1/2 cup?

**Hard.** Measure out 1/2 cup yourself!

### ② Make a shaker

Pour the beans into a container.

Close the lid and tape for a firm seal.

### ③ Shake it up!

### Try this at home

**Loud and soft shakers.** Make one with beads and one with erasers. Compare the sounds.

# 2A. Blow Bubbles

## Where's the Math?

**Math vocabulary**

- Half
- Less
- More
- Big
- Bigger
- Small
- Smaller

**Math topic**

Measurement

- Compare objects by capacity
- Measure capacity

## What to Use

**Per child**

- 1/2 cup water
- 2 tablespoons (T.) dish soap
- 1 teaspoon (tsp.) sugar
- Small, empty yogurt cup
- Pipe cleaner

**To share**

- 2-cup measuring cup
- Tablespoon measure
- Teaspoon measure
- Mixing spoon

## What to Do


① **Measure 1/2 cup water**

② **Measure 2 T. dish soap and 2 tsp. sugar**

Pour into the measuring cup with the water. Mix.

**Talk About**

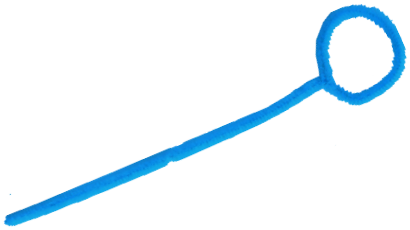
**Easy**. This **big** tablespoon holds **more** than the **small** teaspoon.

**Medium**. How are the tablespoon and teaspoon alike?

**Hard**. How are the tablespoon and teaspoon different?

③ **Pour the mixture into a cup**

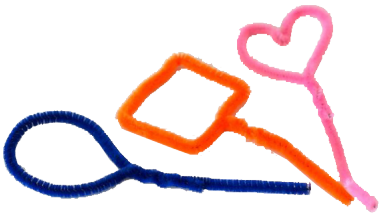
④ **Make a pipe cleaner wand**



⑤ **Blow bubbles!**

## Try this at home

**Blow more bubbles.** Try different blowers (straws, pipe cleaners, kitchen spatulas).



# 2B. Blow Baby Bubbles

## Where's the Math?

**Math vocabulary**

- Half
- Less
- More
- Big
- Bigger
- Small
- Smaller

**Math topic**

Measurement

- Compare objects by capacity
- Measure capacity

## What to Use

**Per child**

- 1/2 cup water
- 2 tablespoons (T.) dish soap
- 1 teaspoon (tsp.) sugar
- Small, empty yogurt cup
- 6 plastic straws, cut in half
- Rubber band

**To share**

- 2-cup measuring cup
- Tablespoon measure
- Teaspoon measure
- Mixing spoon

## What to Do

① **Measure 1/2 cup water**


② **Measure 2 T. dish soap and 2 tsp. sugar**

Pour into the measuring cup with the water. Mix.

**Talk About**

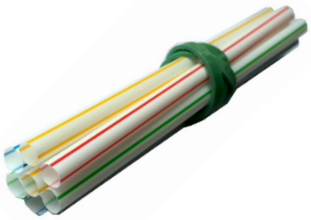
**Easy**. This **small** teaspoon holds **less** than the **big** tablespoon.

**Medium**. How are the tablespoon and teaspoon alike?

**Hard**. How are the tablespoon and teaspoon different?

③ **Pour the mixture into a cup**

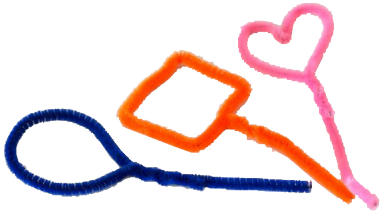
④ **Wrap a rubber band around six straws**



⑤ **Blow baby bubbles!**

## Try this at home

**Blow more bubbles.** Try different blowers (straws, pipe cleaners, kitchen spatulas).



# 3A. Measure, Mix, and Squish Play Dough

## Where's the Math?

**Math vocabulary**

- Less
- More
- Quarter

**Math topic**

Measurement

- Compare objects by capacity
- Measure capacity

## What to Use

**Per child**

- 1 cup white flour
- 1/4 cup salt
- 1/4 cup water
- 2 tablespoons (T.) vegetable oil
- A few drops liquid food coloring
- Plastic bag for storing play dough

**To share**

- Mixing bowl
- Two 2-cup measuring cups (one for water and one for flour and salt)
- Tablespoon measure
- Mixing spoon

## What to Do

① **Measure 1 cup flour and 1/4 cup salt**

**Talk About**

**Easy.** Let's pour up to the 1/4 cup mark.

**Medium.** How can you tell that we poured 1/4 cup?

**Hard.** Measure out 1/4 cup yourself!


② **Add 1/4 cup water, 2 T. oil, and coloring**


③ **Pour the water mixture into the bowl with the flour mixture**

Mix well.

④ **Squish your play dough!**

Store in a plastic bag to keep it fresh.

## Try this at home

**Rainbow of play dough.** Make play dough in your favorite colors.

# 3B. Measure, Mix, and Sniff Play Dough

## Where's the Math?

**Math vocabulary**

- Less
- More
- Quarter

**Math topic**

Measurement

- Compare objects by capacity
- Measure capacity

## What to Use

**Per child**

- 1 cup white flour
- 1/4 cup salt
- 1/4 cup water
- 2 tablespoons (T.) vegetable oil
- A few drops scented oil
- Plastic bag for storing play dough

**To share**

- Mixing bowl
- Two 2-cup measuring cups (one for water and one for flour and salt)
- Tablespoon measure
- Mixing spoon

## What to Do

**① Measure 1 cup flour and 1/4 cup salt**

**Talk About**

**Easy.** Let's pour up to the 1/4 cup mark.

**Medium.** How can you tell that we poured 1/4 cup?

**Hard.** Measure out 1/2 cup yourself!


**② Add 1/4 cup water, 2 T. oil, and a few drops scented oil**


**③ Pour the water mixture into the bowl with the flour mixture.**

Mix well.

**④ Play with your play dough!**

Store in a plastic bag to keep it fresh.

## Try this at home

**Special scents.** Make play dough with cinnamon or other spices.

# 4A. See it Separate

## Where's the Math?

**Vocabulary**
- Empty
- Full
- Half

**Math topic**
Measurement
- Estimate "half full"

## What to Use

**Per child**
- Empty water bottle with cap
- About 1/2 cup of water colored with food coloring
- About 1/2 cup of inexpensive vegetable oil

**To share**
- Funnel for pouring into bottles
- Strong tape and scissors (for adult)

## What to Do

① **Fill the bottle about half way with oil**

**Talk About**

**Easy.** This is about **half full**.

**Medium.** Show me where **half full** would be.

**Hard.** How can you tell it is **half full**?

② **Add colored water**

Fill the bottle almost to the top.

Close the bottle cap and tape for a firm seal.

③ **Shake the bottle**

What happens?

## Try this at home

**Experiment!** Mix oil and water in a clear bottle or container. Add beads or glitter. Predict: What happens if you stir? Try it and see!

# 4B. Tornado in a Bottle

## Where's the Math?

**Math vocabulary**

- Empty
- Full
- Half

**Math topic**

Measurement

- Estimate "half full"

## What to Use

**Per child**

- Empty water bottle with cap
- About 1/2 cup of water colored with food coloring
- About 1/4 cup of inexpensive vegetable oil
- 2 tablespoons (T.) salt

**To share**

- Funnel for pouring into bottles
- Strong tape and scissors (for adult)

## What to Do

① **Fill the bottle about half way with colored water**

**Talk About**

**Easy.** This is about **half full**.

**Medium.** Show me where **half full** would be.

**Hard.** How can you tell it is **half empty**?

② **Add some oil**

Leave a little room at the top of the bottle

③ **Measure and pour in 2 T. of salt**

Close the bottle cap and tape for a firm seal.

④ **Shake and turn the bottle**

What happens?

## Try this at home

**Experiment!** Make another tornado in a bottle. Add a few beads. Predict: What happens to the beads when you shake the bottle? Try it and see!