

# BOATS THAT FLOAT

GRADES K-3



## MATERIALS

- Small squares of aluminum foil
- Ruler
- Plastic tub or bowl filled with water
- Small items such as crayons, pennies to test your boat's buoyancy



## CREATE

Using the aluminum square design a boat that you think will still float when you add objects in it.



## OBSERVE

Add one object at a time to your boat. What happens?



## PLAY

Make a boat with a different design. Add the same objects or test buoyancy with different objects.

## KEY CONCEPTS

### Physical Science

Explore buoyancy, density and gravity as they relate to floating.

### Engineering

Explore different design concepts as they build their boats.

## QUESTIONS TO ASK

- What shapes are you using in your boat design?
- How can you design a boat that will hold the most objects?
- What would happen if you used a different material to build your boat?
- If your boat doesn't float, what changes can you make to your design that might help it float.

## THINGS TO NOTICE

- Child's joy and excitement as they design and build their boat.
- Child's wonderment as they float their boat and as objects to it.
- How the child works with the materials.
- What are they curious about?

## AIMS HANDS ONLINE



## VIDEO RESOURCES

- [Why do ships float?](#)
- [Archimedes Principle](#)

## CHILDREN'S BOOKS

- [Who Sank the Boat? by Pamela Allen](#)
- [What Floats in a Moat? by Lynne Barry](#)