

## PREPARATION

THEME: BOAT BUILDING

### MYSTERY BAG

BOAT (FLOATING CONTAINER IF NO BOAT AVAILABLE)



# EXPLORATION RESOURCES

• LARGE BOWL OF WATER



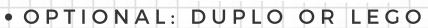
- PLAY DOH OR PLASTICINE (RECIPE TO MAKE HERE)
- ALUMIUNIUM FOIL
- COINS, SMALL STONES OR DRIED
  PEAS













### EXPLORATION

#### THEME: BOAT BUILDING

S T E M M Science Technology Engineering Arts Maths

### Questions/Ideas:

Observing Boats & Containers: Do you think this boat will float or sink? Why? Let's check. What do you notice about its shape? Which containers do you think will float? Why? Which ones will sink? Why do you think that?

Play Doh/Foil Boats: Does a ball of play doh/foil float or sink?

Let's test. How can we change its shape to make it float? How many [pennies] will it take? Can we make it even better so it takes more?

Junk Modelling Boat: What shall we use to make our own boat? Why is that a good thing to use? What else can we add to our boat (anchor, oars, sail)?

**Challenges:** Can we use the play doh to make a round/square/oval boat? Which is the best shape?

#### Learning:

Science: floating and sinking, basics of upthrust and water displacement in considering shapes for boats

Engineering: constructing boats out of various materials

Art: modelling with play doh, decorating boats

<u>Maths</u>: counting weights, more/less/fewer, shapes, size language <u>Problem Solving</u>: identifying improvements to boats

<u>Fine Motor</u>: manipulating a range of materials for purpose

