



## EduTrend Contents

G4C · SCIENCE AND EXPERIMENTATION GAMES · PRIMARY

# Sink or Float Challenge

Predict whether each object will sink or float, test it and compare the result with your guess

Ages 4–8

Level: Foundation

20 minutes

Groups of 2–6 · up to 30

Activity 01

Inside: activity at a glance · step-by-step session plan · facilitator notes · 3 pupil worksheets · assessment checklist

## ACTIVITY 01 · AT A GLANCE

# Sink or Float Challenge

Each child picks an object, such as a cork, coin, apple, key or sponge, and predicts whether it will sink or float, placing a marker on the chart. They lower it gently into a clear tub of water and record what happened. When all objects are tested, the group compares predictions with results and talks about what the floaters have in common.

## Learning outcomes

By the end of the session pupils can:

- make predictions;
- test fairly;
- record results;
- compare predictions with evidence.

**KEY WORDS**

predict · sink · float · test · result · evidence

**CURRICULUM LINKS**

Science: materials and forces.  
Maths: sorting and recording.

**1**

**WONDER**  
Ask a question

**2**

**PREDICT**  
Commit to a guess

**3**

**TEST**  
Try it safely

**4**

**RECORD**  
Write it down

**5**

**EXPLAIN**  
Why did it happen?

**6**

**TIDY**  
Clear up and wash hands

## Materials (per group)

- A clear tub of water and a towel
- Ten small safe objects
- A sink and float chart
- Worksheets 1, 2 and 3

## Before the session

- Fill the tub.
- Check objects are safe.
- Prepare the chart.
- Model a prediction.

**SAFETY**

Supervise water closely and wipe spills straight away. Keep small objects away from children who mouth things.

## ACTIVITY 01 · SESSION PLAN

# Step by step

Committing to a guess before testing makes the result matter.

| Time                 | What happens          | Say or ask                                |
|----------------------|-----------------------|-------------------------------------------|
| 0–3 min<br>Wonder    | Look at the objects.  | <i>“Which do you think will float?”</i>   |
| 3–5 min<br>Predict   | Markers on the chart. | <i>“Why do you think that?”</i>           |
| 5–15 min<br>Test     | Test and record.      | <i>“Was your prediction right?”</i>       |
| 15–20 min<br>Explain | Compare floaters.     | <i>“What do floaters have in common?”</i> |

**CHALLENGE CARD (print or copy onto the board)**

Predict each result before testing, then explain one surprise.

## ACTIVITY 01 · FACILITATOR NOTES

# The science game know-how in brief

The cycle of predicting, testing and explaining is how scientists think.

Recording results shows that evidence is written down and compared, not just remembered.

## Common ideas to listen for

- “Heavy things always sink.” Shape and material matter too.
- “Big things always sink.” Some big things float.
- “A wrong prediction is a failure.” It is a chance to learn.

## Adapting the activity

### Support

Use five objects with obvious results and play as one team.

### Stretch

Shape a foil boat that holds the most coins before sinking.

WORKSHEET 1

# Prediction chart

Name: \_\_\_\_\_

Class: \_\_\_\_\_ Date: \_\_\_\_\_

Tick your prediction and the result.

## Results

| Object | I predict | Result |
|--------|-----------|--------|
|        |           |        |
|        |           |        |
|        |           |        |
|        |           |        |
|        |           |        |

**WORKSHEET 2**

# Sort it

Draw floaters and sinkers.

## Floaters / Sinkers

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## WORKSHEET 3

# Reflection

Draw or write.

**Something that surprised me was...**

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FOR THE TEACHER

# Assessment checklist

Use during the session. One sheet covers up to eight pupils; copy as needed.

| Pupil | Makes predictions | Records results | Explains a surprise |
|-------|-------------------|-----------------|---------------------|
|       |                   |                 |                     |
|       |                   |                 |                     |
|       |                   |                 |                     |
|       |                   |                 |                     |
|       |                   |                 |                     |
|       |                   |                 |                     |
|       |                   |                 |                     |
|       |                   |                 |                     |

Suggested codes: W = working towards · E = expected · G = greater depth

**ABOUT THIS ACTIVITY**

Sink or Float Challenge is a sample activity from the EduTrend Contents G4C Science and Experimentation Games programme (primary, level: foundation). Every activity in the programme follows the same format: a practical challenge, a clear session plan, facilitator notes and ready-to-print worksheets, so that teachers, club leaders and parents can run it without extra preparation.

Full 15-, 20- and 32-week programmes are available from EduStore at [edutrend.org](https://edutrend.org).

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