



# Mini Raft build

## The Task

Using only items found in the school grounds or around the home can your pupils float a fist sized rock for at least 1 minute.

## How?

- The challenge can be done In groups or individually.
- Start with finding out what kind of items float.
- Get the pupils to design their raft (this could possibly be done the day before and ask the pupils to bring in items from home that may be able to help them with their raft design).
- Alternatively bottles or other such items that have been used through the week can be washed and saved with this challenge in mind.
- Rafts can also be 100% built using only natural items found on a walk such as sticks, pine cones, and using long grass to tie them together.

## Considerations

- Where will you float your raft? (a local pond, a big puddle in the playground or perhaps a paddling pool).
- What materials will you use to build your raft and how will you collect them?
- Ensure all litter is disposed of safely and correctly.



### What might you need?

- Wood / Sticks
- Plastic bottles
- Tubs / Jars
- String
- Sticky tape
- Imagination





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## Organisation & Layout

- Plan in classroom, build in school & float in a puddle, paddling pool or large sink.
- Can be done for duration of float or even a race on a small river. Please only use natural items found in and around the water for this type of challenge.
- Please ensure your choice of venue is appropriate for the safety of the group.

## Learning Objectives

- STEM project
- Planning
- Communication / teamwork
- Problem solving
- Experimenting

## Safety Information

- Ensure any “litter” used is appropriate and clean.
- Have you permission to leave the school grounds?
- Is your choice of floating venue safe with easy access?
- Have you done a Risk assessment?
- Clear up all “litter” and man-made items and dispose of them responsibly.

## Review & Assessment

- What was the result?
- What type of raft lasted the longest?
- Compare rafts made with natural materials to those made with man made items.
- Did the results match the expectations?

## Additional Links & Support

[Blairvadach Mini Raft Build—YouTube](#)

[What is Buoyancy—BBC Bitesize](#)

[Teeny Tiny Rafts—The Scouts](#)

