CONSTRUCTION ACTIVITY

"FLOAT YOUR BOAT"



GUIDANCE NOTES

This activity is suitable for all ages and can be adapted depending on how much time is available. The following notes are just guidance and the activity may be adapted and extended to meet individual requirements.

In addition to raising awareness of different roles in construction, the activity also encourages teamwork, collaboration and creativity.

MATERIALS REQUIRED:

- 3 cups and 15 straws per team
- Sellotape and scissors
- Pen/pencil and paper for each group to design their boat
- A vessel to 'float the boats' in
- Stickers so each member of the team can write their job role on it
- A copy of the activity for each team (print pages 2-4 of this document)

TIMINGS

This version is suited to 30 mins and may be extended if more time is available e.g.:

- Provide more time to build and test the boat
- Give each group credit to buy the materials, set a price for each item and the students can choose what to buy. Introduce a Quantity Surveyor role to oversee this part of the activity.

PENALTIES

If you have older students you may wish to introduce penalties e.g.:

- Lose 5 coins from your total if a rule is broken
- Lose 5 coins if you a drop a coin while placing them on a boat

Just update the rules on the following activity sheet to include them.

Finally it's worth mentioning if a student is showing initiative and thinking 'outside the box' the rules are flexible, the activity is supposed to be fun and can be adapted any way you wish to meet the needs of your students.

For lots of free resources including videos, activities and presentations:
www.goconstruct.org

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PLEASE WAIT FOR THE CHALLENGE TO START BEFORE TURNING OVER



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THE CHALLENGE

To work together in teams of five to design and build a boat out of cups and straws and see how many coins it can hold before it sinks.

The winning team will be the one with the boat that takes the most coins prior to sinking.

Materials to build the boat:

15 Straws

3 Cups (only two can touch the water)

Sellotape

Scissors

THE TEAM

Decide who will take each of the following roles. Everyone can discuss and input ideas BUT cannot take on another's delegated role (E.G. A site manager cannot draw the design)

1. ***PROJECT MANAGER:***
   Manages the team and ensures the rules are adhered to
2. ***ARCHITECT:***
   Designs and draws the boat
3. ***PLANNER:***
   Timekeeper, ensures the team stick to the allocated timings
4. ***SITE MANAGER:***
   Builds the boat
5. ***ENGINEER:***
   Tests the boat / Places coins on the boat

TIMINGS

You have 30 MINS to complete this task

5 MINS to read brief, allocate roles and choose team name

10 MINS to discuss and design the boat

15 MINS to build the boat *(materials not to be touched until this stage)* and to test the boat design and make any changes

TIMES UP, TIME TO FLOAT YOUR BOAT!

THE RULES

1. **Pre-loading of coins is not allowed**
2. **Cups must not touch the bottom of the box**
3. **You cannot use the edge of the box to stabilise the boat**
4. **One cup needs to be suspended so it doesn't touch the water**
5. **One test run is allowed WITHOUT COINS**
6. **You must first float, then load**

GOOD LUCK!

There are over 180 job roles in construction!
- **to find the one for you visit: www.goconstruct.org**