

Glenfield Infant School Knowledge Organiser



Year 1—Autumn 2

DT

Structures- pencil pots

What should I already know?

- I have used scissors to cut out.
- I have used glue to stick and join materials.
- I can use both scissors and glue safely.

1. What is a structure? What makes an object more stable?



We found man made structures and structures made by animals.



We explored how to feel more stable in a balance by making our base wider.



A structure is built to do a job.

A wider base makes something more stable.

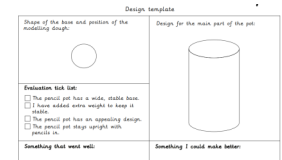


4. How will I design my pencil pot to be stable? How will I make it appealing to a year 1?



What design will the user like best?

How will it be stable?



The user is the person the object is for. A wide base with added weight will stop it toppling over.



Vocabulary

structure	Something that is built to do a job.
Base	The bottom part of something that it stands on.
free-standing	Can stand up on its own
design	To make, draw or write plans for something.
stable	Not likely to topple over.
unstable	Likely to topple over.
evaluate	Decide whether something meets the design criteria.
compare	To say how things are the same or different.
better	Nicer, easier to use or last longer.
worse	Less nice, harder to use or breaks easily.
user	The person that something is made for.

2. How can I build a stable tower?

These tall structures have a wider base and narrow top.



We tested which towers were more stable.



A wide base makes a structure more stable. New materials mean buildings can be taller than before.



5. How can I join card together?



We tested which was the best method to join card together.

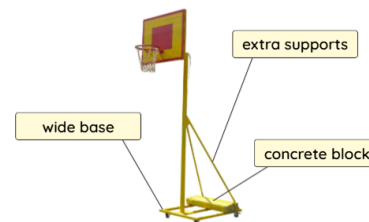
We used carefully cutting to cut a shape neatly.

Masking tape is quick and strong for sticking card together. Even cutting makes the pot stable and not wonky.



3. How can I make a structure more stable?

How does a basketball hoop stay upright?



Adding weight to the base of a structure makes it more stable.

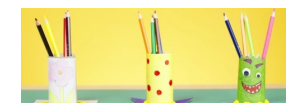


6. How stable is my pencil pot?

We tested our pots to check they were stable. We added weight and checked fixings.

We decorated our pots. We checked against our design.

- Evaluation tick list:
- ☐ The pencil pot has a wide, stable base.
 - ☐ I have added extra weight to keep it stable.
 - ☐ The pencil pot has an appealing design.
 - ☐ The pencil pot stays upright with pencils in.



Evaluate means looking if something meets the design criteria.

