

The D&T Summer Design Challenge.

You will need a pencil, ruler, coloured pens or pencils and 3 sheets of A4 paper. This is just a design - you will not be expected to make it, so be creative!

Your Design Brief:

When school starts again you may need an Alarm Clock to wake you up. We would like you to design an Alarm Clock that reflects *your* personality.

Specification:

On one sheet of paper write down a list of what is **important** for your clock. For example;

1. Size: **height**, width, **depth**.
2. Overall shape: **tall**, slim or round etc
3. Colours: **bright**, **pale** or **monochrome** etc
4. Style: modern, old fashioned or **themed**;
for example, a **Space Theme** !
5. Materials that it is to be made from:
plastic, **wood**, cork, stone, **metal**, **fabric** etc....
6. The face (numbers): analogue or **digital**.
7. Environmental Issues: **solar power**, **recycled materials** etc.....
8. Does it do anything other than tell the time?

Initial Designs:

- Fold a second sheet of A4 paper in half, then half again to produce 4 equal shapes; finally unfold and flatten.
- Draw a design idea in each quarter of the page.
- Look at your drawings, think about your favourite and why you like it.
- Ask people around you what they think is **good** about each design.

Final Design:

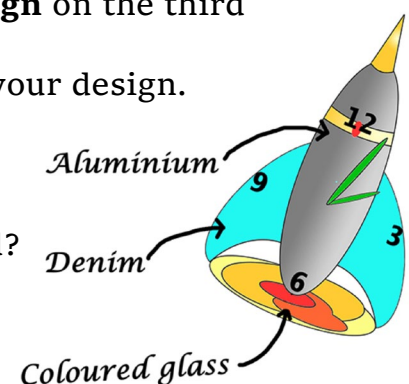
Using the information from above draw your **Best Design** on the third piece of paper.

Use colour and write notes (annotations) that explain your design.

Extra Challenge.

Modelling:

Can you make a 3D model of your clock from cardboard? Cereal packet cardboard is good to use (*and you would be recycling*).



For something extra to do in D&T take a look at.....

<https://www.jamesdysonfoundation.com/resources/challenge-cards.html><https://designmuseum.org/whats-on/families/create-and-make/create-and-make-at-home>. Look at 'Design your own exhibition' for ideas on Nets. It may help with the model making!

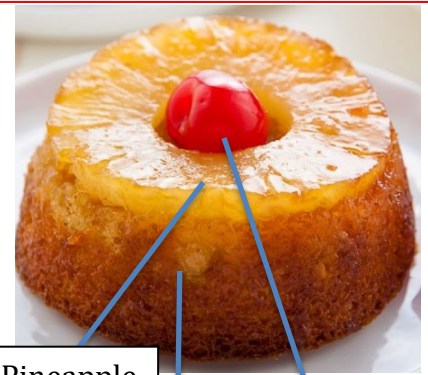
Ask an adult before trying any of the experiments or projects.

My Summer Food Cake Challenge

Design a Fruit Upside Down Cake

If possible, make the cake you have designed **OR** make a cake using the recipe at the bottom of the page.

Design your cake on a sheet of paper. Use your imagination to think about how you will flavour the sponge, what fruits you could use or how you could make an interesting shaped cake. Colour it and label it.



Pineapple

Cherry

Lemon sponge

If you are going to make the cake, you could use different fruits such as:

Cored apple rings. Pear. Mango. Banana. Peaches. Kiwi. Orange segments.

****Adult Supervision needed for practical***
Wash hands, Tie hair back, wear an apron

If you are going to make the cake, you could use different flavours such as:

Vanilla essence, cocoa powder, cinnamon, coconut

Ingredients (basic recipe)

- 50g soft margarine
- 50g caster sugar
- 50g self-raising flour
- 1 egg
- 1 tablespoon brown sugar (or honey/syrup)
- 2 Cherries
- 2 slices of Pineapple

Take a picture

Wash out a used tuna tin (*really well*) to use as a cake tin

Equipment:

Foil container/muffin tin/Tuna tins. Baking paper, Mixing bowl, Wooden Spoon, Sieve, Jug or mug, Fork, Spatula, Oven cloth

Method:

1. Pre heat the oven 180 C or gas m5
2. Grease and line a suitable cake tin (don't forget the sides)
3. Beat the fat and sugar together in the bowl until it is creamy in colour
4. Beat the egg in the jug/mug and add in a little at a time, beating well each time.
5. Sieve in the flour and mix gently
6. Sprinkle demerara or soft brown sugar on base of tray/tins
7. Arrange pineapple and cherries (**or other fruit you have available**)
8. Place sponge mixture on top, scrape all of it out with the spatula.
9. Bake for 15 to 20 mins until the middle bounces back up if you press it
10. Let it cool for at least 5 mins, run a knife round the edge and turn out onto a plate

When your cakes are cooking, get all of your washing up done.



For something extra to do in Food prep, take a look at\;

<https://www.foodafactoflife.org.uk/11-14-years/quizzes/>