



Joseph Leckie Academy

Design Technology Transition Activity

Design Technology - Smart Phone Design Project

Task 1: Research - Describe the way Smart Phones have developed over time

- 1 Watch the video by clicking the link below. The video shows how mobile phones have developed over time. While watching, make a note of the new features you think were the most important developments

<https://www.youtube.com/watch?v=xnobkts0TM>

- 2 Create a timeline poster of mobile phone development. The timeline should include;

- A line running through the centre of the poster with times labelled in time (chronological) order.
- Pictures of the particular feature (for example, when emojis are created some images of the emoji) must be included, else your timeline will look very dull.
- An explanation for each feature next to the picture.

Your timeline should have enough key features to fill an A4 page



1973 The first mobile telephone call is made

2019 The iPhone 11 pro with an ultrawide camera for wide angle shots



Task 2: Setting Targets - Decide who your phone design will be for and what features it should have

1 Match the users to the products below



shutterstock.com • 1189459903



shutterstock.com • 502715773



shutterstock.com • 763047211

2 Decide who the smart phone you will be designing is going to be targeted at. This will be the first point in your specification.

3 Create a specification for your smart phone. The specification will set out what targets your smart phone will meet. The targets should be realistic and clear, and should match the person you are designing the phone for. Here are some suggestions you could use for the targets:

- *Function: What will the phone do? What features will it have?*
- *Environment: Will the phone be good for the planet? How?*
- *Size: How big/small will the key measurements on the phone be?*
- *Cost: How much will you sell the phone for?*
- *Looks: What will the phone look like? Is there a style or colour you want the phone to be?*

Task 3: Logo Design - Create a logo that will help to make your smart phone appeal to your customer.



- 1 Rank the pictures above from most interesting to least interesting. Explain your choices for first and last place.
- 2 Create your own **logo design** for your smart phone company. The logo should;
 - Have an interesting name (the name doesn't have to be in the logo, but there should be a name).
 - Have a design that is suitable for your chosen customer from task 2.
- 3 Explain some of the key features of your logo, is there a shape or colour in the logo that represents something, have you replaced a letter from the name of the company with an image, where could the logo go on the phone design?

Task 4: Taking inspiration - Evaluate current products that are similar to the one you are designing. Identify strengths and weaknesses in current products that you could use or avoid in your own design.

Choose 4 different phones that are currently available to buy today.

- 1 • Print out or sketch a picture of the phone if you are working on paper.
 - If you are working on a computer paste a photo of that phone onto the page you are working on.
- 2 • Research the good and bad features the phone has on the internet or, if someone in your household owns that phone, ask them what the good and bad features of it are.
- 3 • Record your findings- the good points should have a + sign or be written in green and the bad points will use a - sign or be written in red. Do this for each phone.
 - One word is not enough, make sure you write down the feature, then explain what is good or bad about that feature. There is an example on the right.
- 4 • Pick out and circle the best features that you want to include in your phone design and the worst feature you want to avoid in your design, at the bottom of the page write a specification (target) point (see task 2 for setting targets) for your phone that uses the information you found out today.

+ the iPhone SE is a low cost compared to other iPhones. This means it is affordable, especially for children who want an iPhone but may not be responsible enough to look after it.



- the iPhone SE has a much shorter battery life than other iPhones, so if you go camping or are out overnight it could be a problem.

Task 5: Drawing Design Ideas - Create interesting and original design ideas. Explain how design ideas could work using notes and drawings.

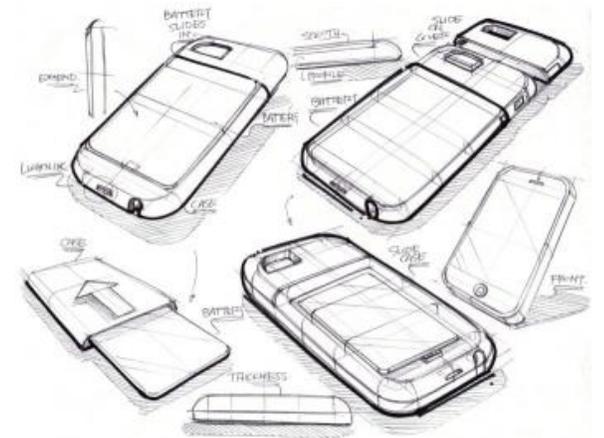
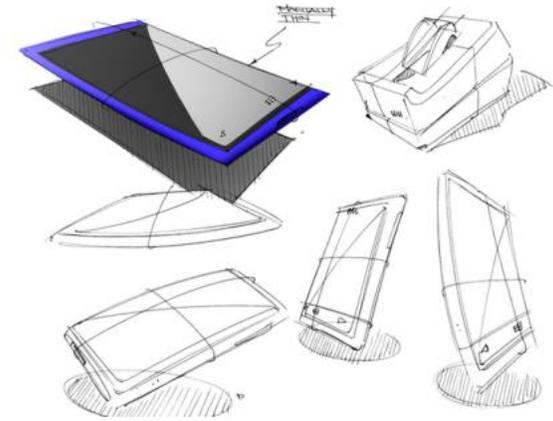
1 Sketch out 4 different drawings for your smart phone.

Top Tips:

- Have a sharp pencil
- Sketch lightly and once you are happy with the design, go over it with a pen, this looks much neater than rubbing out
- Decide where the drawing will cast a shadow and add some shading to make the item stand out on the page
- Use the targets you set in Task 2 and Task 4.
- Try to make the four ideas different to each other, not just 4 rectangles.

2 Describe next to each design (using small notes, no full sentences needed) how the phone works.

- This could be anything to do with how the phone works such as; how it opens and closes/unlocks, what physical buttons there are and where they are, how it stands up, where the camera is, exciting or interesting features.



Task 6: Packaging Design - Identify what parts are needed to be packaged in your product. Design suitable packaging that contains separate parts, but still attracts buyers.

- 1 List the parts that will come in the box with the phone handset.
- 2 Draw out 4 different 3D shapes that the packaging could be. The shape could be interesting or a function stacking shape.



Juice make charging cables but use the word juice as a slang word for electricity. Part of their brand is to use packaging that is designed to look like a juice carton. They also colour match the packaging to the cable

- 3 Draw the box shapes when they are open. Explain how the box will open and where all the separate parts will be stored. How are you going to keep the parts safe?



The iPhone box uses a top divider for the handset then 3 compartments for the plug, charger and headphones so they don't get damaged or tangled until they are opened.

- 4 Use your logo design from task 3 and put it on the box along with any other pictures/information to go on the front of the packaging. Use colour to ensure the design is interesting.

Beats by Dre packaging has separate compartments with Velcro openings and foam inserts to protect the contents



Task 7: Sustainable Materials - Know the different sustainable choices for materials when selecting one for a product. Evaluate the benefit of each type of sustainable material.

- 1 Mix and match - look at the four definitions and match them to the correct sustainable word, use online research to help if you need to.

Sustainable Words: **Recyclable, Biodegradable, Renewable, Recycled**

Word				
Definition	1. A material that can be regrown or made again and again, meaning it's stock is not depleting.	2. A material that is able to be broken down and turned into a new material.	3. A material that used to be something else but has been broken down and turned into something new.	4. A material that can decompose and break down in soil so it doesn't stay in landfill or oceans for years.

- 2 Choose one type of material from task one, and complete some research online about it, find examples of specific materials, what products the materials can be used to make and then choose one part of the phone that could be made using the materials you have researched.

Show this in a poster with pictures to help.

- 3 Write a paragraph for each of these statements to persuade someone to agree with them.
 - (a) We have to choose sustainable materials in new products for the future.
 - (b) Sustainable materials aren't the most important thing in a phone design.

Task 8: Online Safety - Describe the different issues facing children when online. Design ways to help children who may have encountered trouble online.

1 Describe the risks or dangers that can be involved with these online activities/products.

- (a) 'Free to play' games with loot boxes
- (b) Social Media
- (c) Livestreaming
- (d) Wearable Technology such as a Fitbit



2 Design an app for a smart phone that helps keep children safe online.

Your app design your needs to include the following things

- (a) An app name
- (b) An app tile- the little logo for the app
- (c) The purpose of the app- what will the app do, think of the following things that the app could do such as; raise awareness of online dangers, stop someone from doing something dangerous online, help report an online issue.



3 Research online safety and describe two different ways you can report an issue you have online.

Task 9: Advertising - Describe what makes a good advert. Create an advert showing off your mobile phone design.

1 Study the three phone posters below and watch the phone advert videos here

<https://www.youtube.com/watch?v=SQIbeAk-bFA>

<https://www.youtube.com/watch?v=3dhX7GxA-jA>

2 Describe 3 desirable features of the posters and videos that make the phone desirable

3 Create your own phone poster or video advert design for the smart phone you designed in task 5.

Make sure your poster has;

- A picture of the phone
- The name of the phone
- A catchy slogan or message
- A background or font to make the phone stand out.
- A soundtrack if you are designing an advert.

