

Design and Technology

Year 7 - Graphic Design



Name:Form:.....Set:.....

Your target for this year is to.....

Autumn Assessment		Spring Assessment		Summer Assessment	
Effort: 1,2,3,4 Behaviour: 1,2,3,4		Effort: 1,2,3,4 Behaviour: 1,2,3,4		Effort: 1,2,3,4 Behaviour: 1,2,3,4	
1 - Exceeding expected target		1 - Exceeding expected target		1 - Exceeding expected target	
2- Reaching expected target		2- Reaching expected target		2- Reaching expected target	
3- Not yet meeting expected target		3- Not yet meeting expected target		3- Not yet meeting expected target	
Homework	y/n	Homework	y/n	Homework	y/n

Autumn term pupil set goal:- _____
 _____ Date.....

Spring term pupil set goal:- _____
 _____ Date.....

Summer term pupil set goal:- _____
 _____ Date.....

Teacher _____

Test Score _____



KS4 and Sixth Form options and career pathways



Engineering
 Graphic Design
 Textiles
 Construction
 Product Design
 Food & Hospitality



KS3 Design Technology Learning Journey



End of KS3 Test Progression to GCSE 9-1 Design Technology, L2 Engineering, L2 Textiles, L2 Graphics, L2 Construction, L2 Hospitality and Catering



Food Practical
Explore your culinary skills by planning and making dishes such as fresh pasta, cottage pie, samosas, lasagne and Victoria sponge.

Product Design-Wooden Amplifier Project
Make and modify your own amplifier speaker for your mobile phone



Textiles Upcycling Revolution:
Eco festival project

Evaluation: Evaluation and improvements to the functionality and aesthetics of the products

Year 9 lesson structure
Move around the department on a carousel cycle – You will visit Food, Textiles and Product Design throughout the year, giving you a great taste of things to come in KS4

YEAR
9

**CREATIVITY
IDEAS
INNOVATION**

Nightlight Packaging: Making skills
Logo, branding and packaging. Hand skills and digital design

Nightlight: Making skills
CAD/CAM, hand tools, laser cutter, circuits, soldering

CAD DRAWING Design
Produce design ideas & technical drawings to help you plan, both by hand and by CAD

Nightlight Working to a design brief
Research, design and develop a working nightlight using wood, plastics and electronics.

Nightlight: Make Tasks
Put your design ideas into practice using a range of materials, new tools, equipment and techniques.

Stitch a Selfie:
Drawing with Stitch- Turn your selfie into an embroidered piece of Textiles.

Mechanisms. Explore the power of linkages, CAMs, gears and levers through designing and making CAM toys and linkage puppets

Mechanisms - Pop-up Card
Explore paper engineering and mechanisms

New Techniques
Computer Aided Design, mechanisms and linkages, machine skills, pattern cutting, transfer printing, tie-dye, laser cutting.

Evaluate your outcomes
Modifications, further developments and improvements

SUSTAINABILITY

CAD CAM Embroidery



Sustainable Design
Positive Vibes project

YEAR
7

Design Task
Design and communicate your ideas through sketching and annotation

Workshop health and safety

Introduction
What is Design Technology? Career pathways and the industry

Graphic Design
An introduction to graphics – colour, typography, logos, branding

Make Task
Bring your designs to life using a range of materials, tools, equipment and techniques to create a prototype of your idea.

Responsible designers,
sustainability, materials and biomimicry.

CRITICAL THINKING



Year 7 Graphic Design End Points



Research and topic introduction

- ☐ Know how to use research including the study of different cultures, to identify and understand user needs
- ☐ Know how to consider the influence of a range of lifestyle factors and consumer choices when designing products
- ☐ Know about an increasing range of designers, engineers, chefs, technologists and manufacturers and be able to relate their products to their own designing and making
- ☐ Know how to investigate and analyse the positive and negative impact that products can have in the wider world

Design and Planning

- ☐ Know how to investigate and analyse products through disassembly to determine how they are constructed and function
- ☐ Know how to use specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations
- ☐ Know how to combine ideas from a variety of sources
- ☐ Know how to develop and communicate design ideas using annotated sketches
- ☐ Know how to produce 3D models to develop and communicate ideas

Practical

- ☐ Know how to follow procedures for safety and understand the process of risk assessment
- ☐ Know how to use a wider, more complex range of materials, components taking into account their properties
- ☐ Know how to select appropriately from specialist tools, techniques, processes, equipment and machinery, including computer-aided manufacture.

Evaluate

- ☐ Know how to evaluate their products against their original specification and identify ways of improving them
- ☐ Know how to actively involve others in the testing of their products

Technical Knowledge

- ☐ Know how the performance of structural elements to achieve functioning solutions
- ☐ Know about the physical properties of materials e.g. grain, brittleness, flexibility, elasticity, malleability and thermal

Keywords and vocabulary for this project

- ☐ Green - I know these words
- ☐ Orange - I have heard but not sure what they mean
- ☐ Red - I have never heard or seen before

☐ Shade ☐ Render

☐ Text ☐ Font ☐ Logo ☐ Slogan

☐ Advertise ☐ Promote ☐ Pop up

☐ Front ☐ Middle ☐ Back ☐ Landscape

☐ Portrait ☐ Typography ☐ Tonal range

☐ Corporate Identity ☐ Branding ☐ Professional

☐ Emblem ☐ Mechanism ☐ Layer

☐ Foreground ☐ Middle ground

☐ Background ☐ Prototype

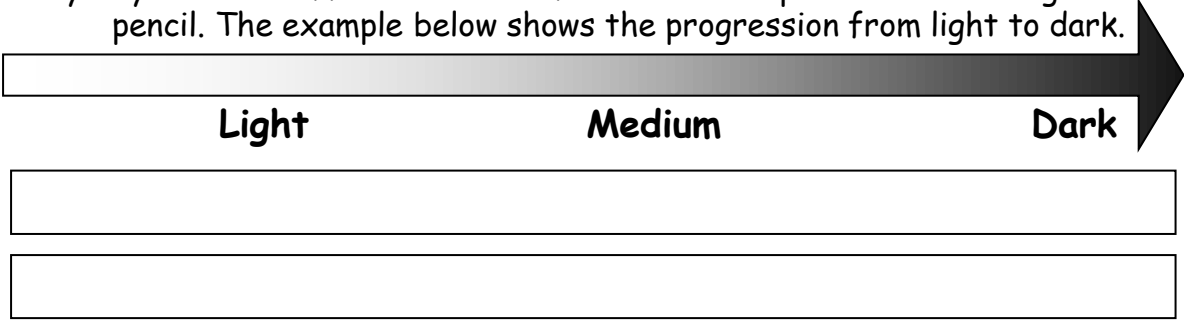
☐ Rigid ☐ Product Life Cycle

☐ Deforestation ☐ Sustainable ☐ Landfill

Knowledge - Graphic Design - Shading

Control the Pressure!

An easy way to show different values of a colour is to press harder or lighter with your pencil. The example below shows the progression from light to dark.



Task 1 - Shade in the rectangles with a tonal range from light to dark. Remember to use coloured pencils and take your time!

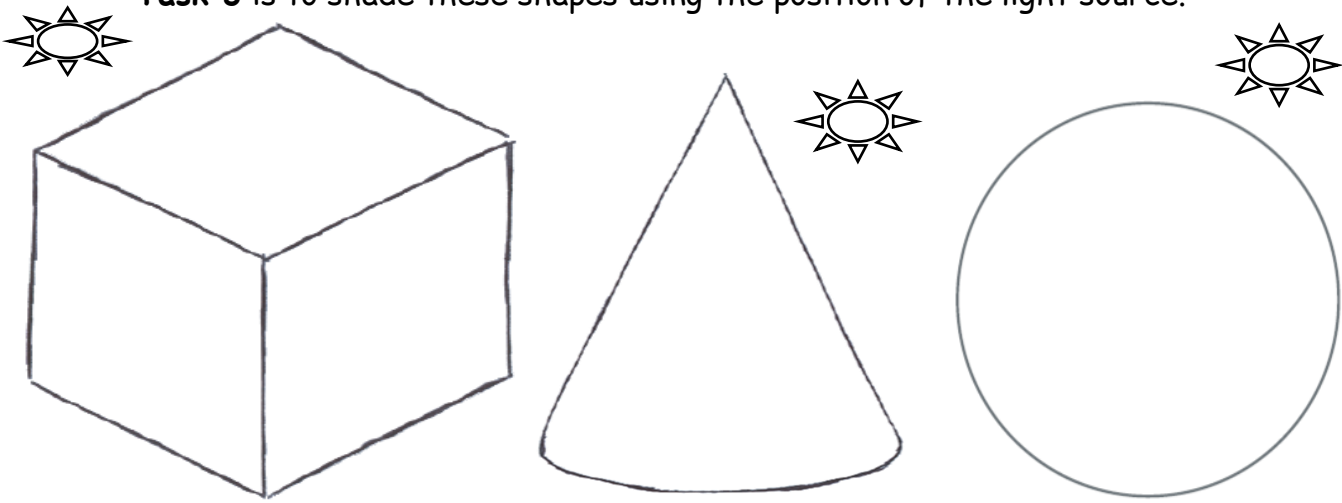
In order to be successful with shading I should – (name 3 things)

- _____
- _____
- _____

Shading Shapes

It is important to shade shapes according to where a light source is coming from.

Task 3 is to shade these shapes using the position of the light source.



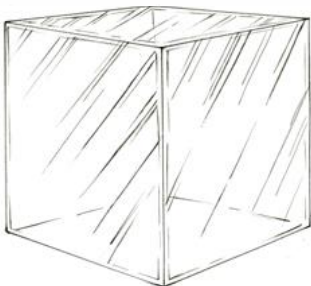
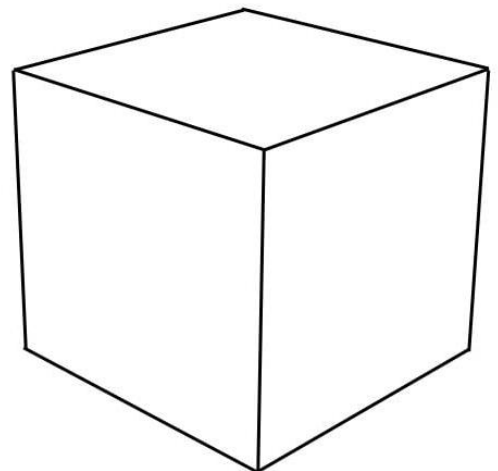
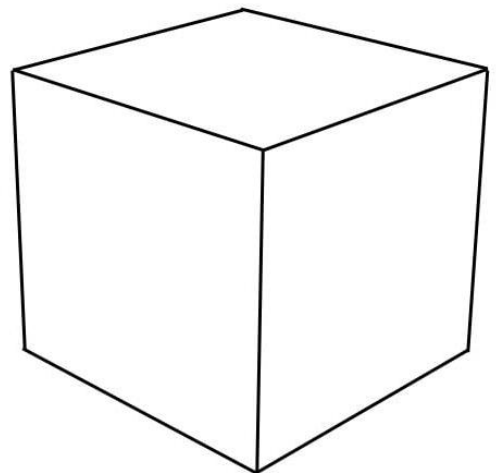
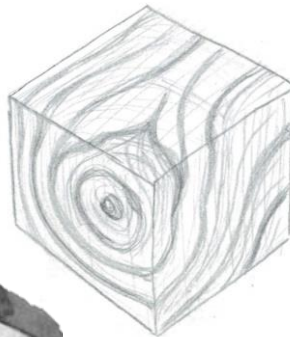
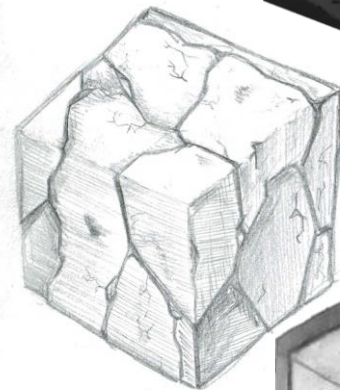
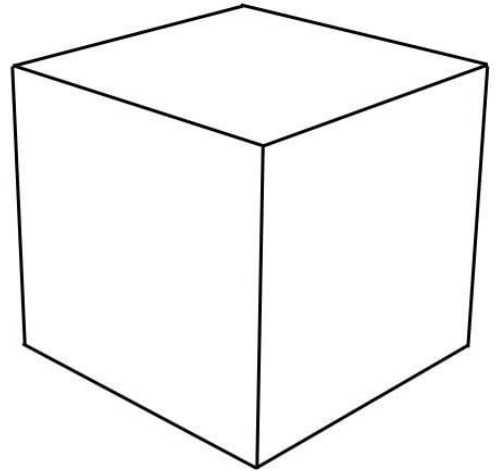
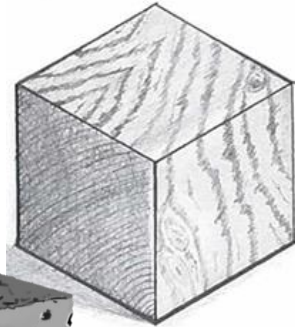
Plus +	
Minus -	
Improve 🍷	

Knowledge ~ Graphic Design -Rendering

Date:

APPLYING
KNOWLEDGE

Rendering - creating the illusion of light, tone and texture.
Creating the illusion that the object is made of a particular material.
Select 3 textures to render each of the blank cubes to the right.

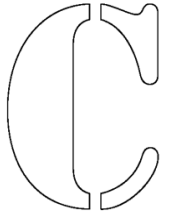
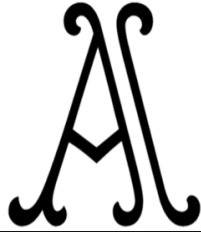


Knowledge ~ Graphic Design - Typography

Date:



Typography is the different style, shape and design of fonts and letters. Try your best to copy each letter in the space below.



GRAPHICS

Graphics



Effort grade

1 2 3 4

Knowledge ~ Graphic Design -Logos

Date:

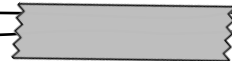


A logo is a graphic mark, emblem or symbol used to help promote and advertise a company.
This gives the company public identification and recognition.



Word Art Design

Create 3 of your own word art designs in the spaces below



Effort grade

1 2 3 4

Graphic Design - Logos



Task 1 - Design a new logo for the **Cowley Eco club**. This could then be used on the school TV screens, website and posters around school. This would help to advertise and promote the work that they do, upcoming events and reminders.

Task 2 - After this, your teacher will demonstrate how to create logos **digitally** using a computer. This will develop your work further and make them look more professional

Create an imagery word bank to help you come up with ideas

leaf

energy

1

2

3

4

Which logo do you think is your best idea and why?

Graphic Design - Pop up Mechanisms

There are many types of pop mechanisms, we will now go through them and fill in the sheet below.

V Fold Mechanism

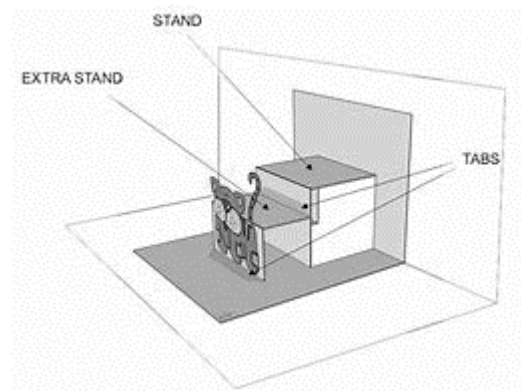
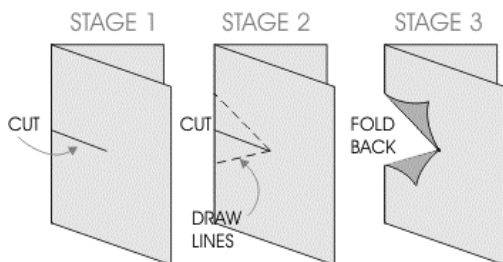
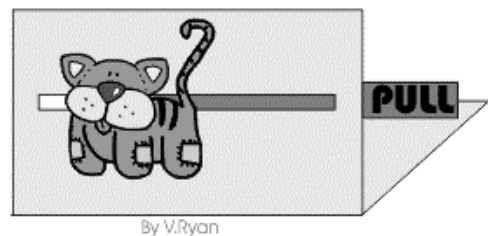
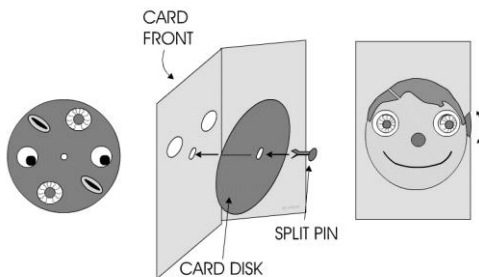
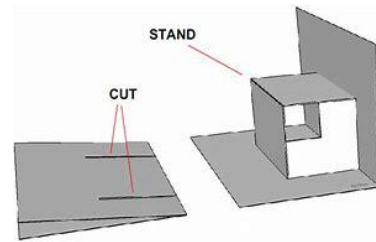
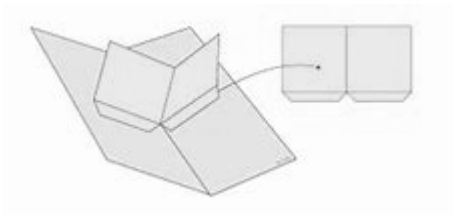
Mouth Mechanism

Layer Mechanism

Sliding Mechanism

Internal Stand Mechanism

Rotary Mechanism



Date:

Graphic Design - Pop up Mechanisms

Produce 2 prototype mechanisms and glue them below

Prototype model

Name the mechanism

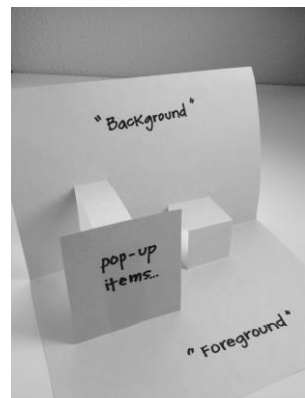
Prototype model

Name the mechanism

Explain your idea for you pop up card.
Talk about what the mechanisms will do.

Which of the two mechanisms that you tried are you going to use *and why?*

Task - Make your pop up card with your final chosen mechanism. Try to be as accurate and creative as possible. Consider Foreground, middle ground and background.



Effort grade

1 2 3 4

Date:

Graphic Design - Pop up Mechanisms

Your pop up card can be **Landscape** or **Portrait**.

Label the correct name for the positions of the two pieces of A4 paper below

A4
paper

A4 paper

Design Brief - To design and make a popup card which has a pop up or moving mechanism.

The theme must be to do with **a celebration or occasion** of your choice.

Use the space below to produce some ideas for you pop up theme.

These can be sketches of characters or imagery and ideas of how it will work.

Effort grade

1 2 3 4

Test Your Knowledge!



Name 3 pop up mechanisms

- _____
- _____
- _____

3

What is a target market?

1

What is typography?

What is a logo?

2

Why would we use different types of font and typography?

1

Why do companies use logos?

1

Why do we use card over paper for pop ups?

1

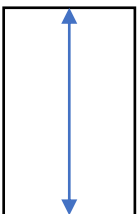
What is a slogan?

1

Why is colour important in logo development?

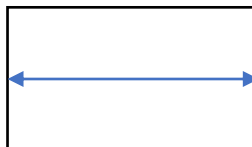
1

Is this portrait or landscape?



1

Is this portrait or landscape?



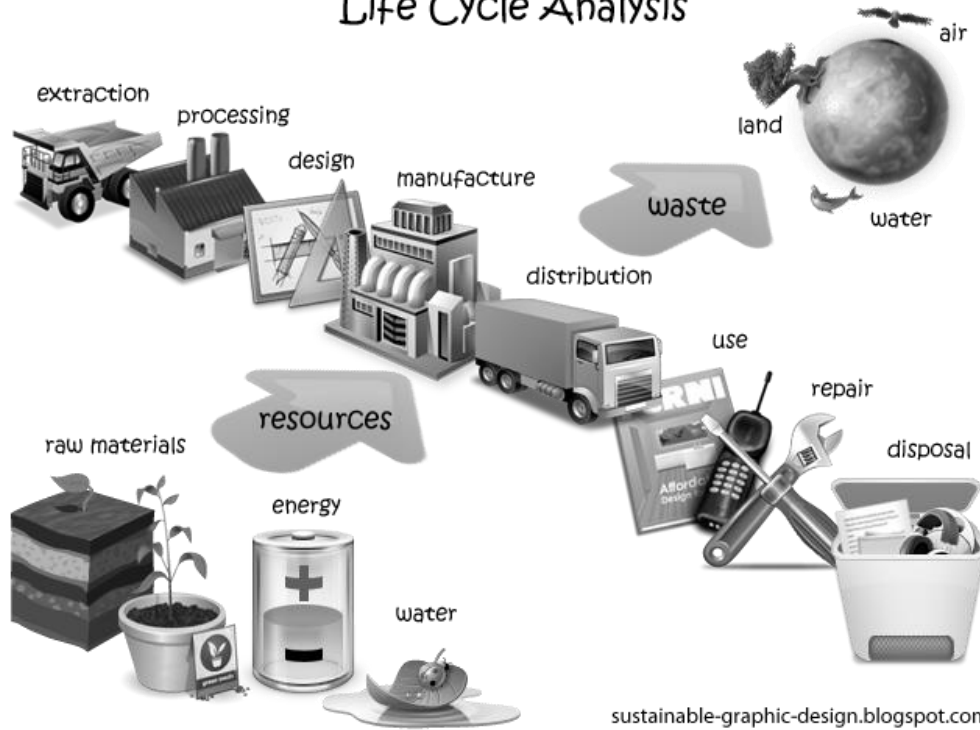
1

What did you score? ____ / 13

Graphic Design - Life Cycle Analysis

Life Cycle Analysis (LCA) is a tool for the evaluation of the environmental aspects of a product or service system through all stages of its life cycle. It basically means the start and end of a product and the affects in between.

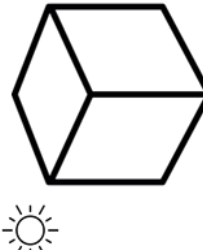
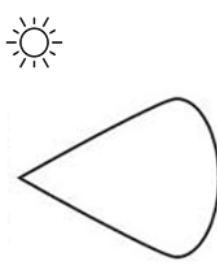
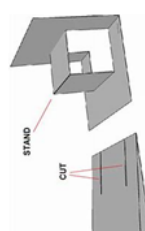


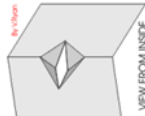

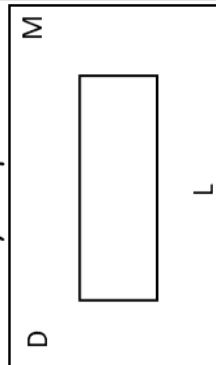

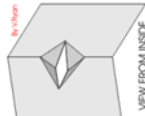
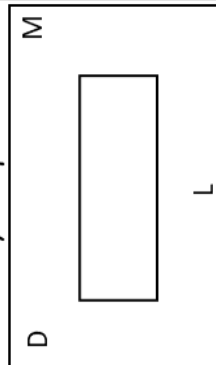
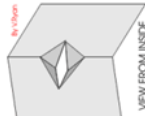
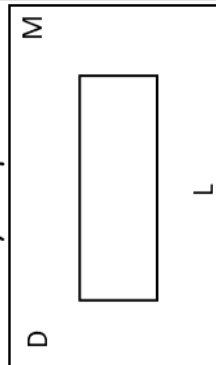
Life Cycle Analysis



Using the diagram above, can you describe what the Life Cycle Analysis process for a greetings card might be? There are some key words in the word bank to help

Word bank

Resources Landfill Waste Transport Habitats Energy Pollution Factories
Trees Deforestation Paper Sustainable

Think.Pair.Share Why might you use different styles of fonts? Your teacher will select a pupil at random to share their thoughts	Shade the cube below 	Would we use paper or card to make a pop up? Paper/ Card Now, consider why	Name a type of pop up mechanism	Spelling Challenge your teacher will give you a word	Draw a simple logo for a sweet shop	Spelling Challenge your teacher will give you a word
Shade the cone below 	Think.Pair.Share Can you explain 'tonal range' to your partner. Your teacher will select a pupil at random to share their thoughts	Which mechanism is this? 	Shade the cylinder below 	Spelling Challenge your teacher will give you a word	What is a logo?	Is this landscape or portrait? 
Which mechanism is this? 	Spelling Challenge your teacher will give you a word	Is this landscape or portrait? 	Think.Pair.Share Why do you think companies use logos? Your teacher will select a pupil at random to share their thoughts	Quick sketch! Draw a capital 'K' in bubble font	What is a slogan?	Think.Pair.Share Why might we use different colours when designing logos or graphics?
Control your pressure! 	Spelling Challenge your teacher will give you a word	What does CAD stand for?	Quick sketch! Draw a capital 'K' in bubble font	What does CAD stand for?	Is this landscape or portrait? 	Think.Pair.Share Why do you think companies use logos? Your teacher will select a pupil at random to share their thoughts
Which mechanism is this? 	Spelling Challenge your teacher will give you a word	Control your pressure! 	Which mechanism is this? 	Spelling Challenge your teacher will give you a word	Control your pressure! 	Spelling Challenge your teacher will give you a word

