Year 8 Technology – inclusion booklet

Name _____ Form ___

Rock bands are not the only people to have spectacular sign-written vehicles

'A vehicle wrap is a digitally printed vinyl that can completely transform cars, vans and trucks by covering the whole vehicle or just part of it in advertising or a rock band's branding. They are printed in full colour using anything from simple logos to intricate designs and photos' (Source: Internet)

Vehicle wraps

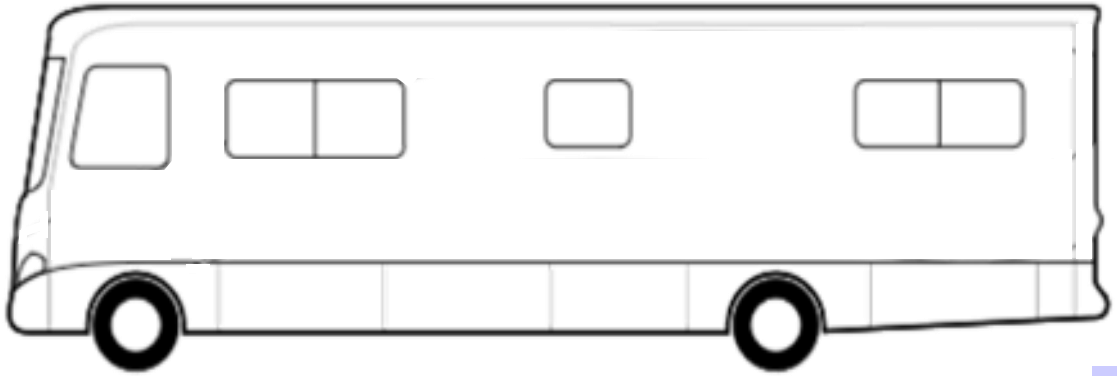
Task : In pencil, sketch 2 different exciting ideas to cover as much of the side of a tour bus as you can, you can chose any band you like - think BIG, think BOLD, think Impact! The band want to be instantly recognised!

1.

2.

3.

Now, still in pencil, transfer your best idea and most dynamic design onto the outline below.



Lesson 1

CD, Vinyl Album or Download Artwork Design


Whenever bands or artists release singles or albums they always have artwork to help promote their music. A lot of artwork relies on photos – but not always

Design Brief:
A new band is to release their first single. Design the promotional artwork for the single.

Think of…
1. a name for the band or artist
2. a name for the single
3. what type of music it is

Specification
•The artwork should fill the square.
•It should reflect the image of the band or artist and the style of the music.
•It should be appropriate for any age group.
•Any text should be clear and legible (readable).

All must: design appropriate, original artwork that includes the name of the artist and song title.
Most should: produce work that clearly captures the artist's image in a innovative way.
Some could: design artwork that demonstrates good design flair and a range of graphical techniques.

Wacky Furniture Design

Look at the furniture examples above.
They are all a bit weird and wacky shapes. The designers are having a bit of fun and their designs grab our attention.

But are these designs functional or just for the aesthetics ?

Task :
In the spaces provided you have to come up with your own wired and wacky shaped furniture design.
In the two smaller boxes think about designing something smaller to get the hang of it then in the bigger box draw something on a larger scale.
Don’t for get to colour them in and add some annotation.

Kitchen Workplace Safety

Kitchen Workplace Safety Common

The Health and Safety Executive (HSE) is responsible for enforcing **commercial** catering health and safety regulations which can cover a wide ranging spectrum of businesses including pubs, hotels, restaurants, cafes, fast food outlets, bistros, contract caterers and others where food and drink is prepared and served for the general public. Many accidents occur in kitchens every day and it is the HSE's responsibility to ensure that **regulations** are adhered to in order to minimise the risks. Of course, hygiene in the kitchen is also an integral part of kitchen workplace safety but that is the **responsibility** of the Environment Health Department which will be covered in a separate article contained on this website.

Common Causes of Accidents in the Kitchen

The **predominant** causes of injury in a commercial kitchen are from slips, trips and falls, manual handling which can result in musculoskeletal injuries and exposure to hot or harmful substances.

Slips, Trips and Falls

Most slips, trips and falls in kitchens occur due to wet floors so it's important to wipe up any spillages that occur **immediately** and to dry the floor. Warning signs saying 'wet floor' and even cordoning off certain areas are actions which should also be taken after spillages or after mopping the floor during cleaning until it is dry. Often, it's an uneven floor or loose or damaged floor tiles which are responsible for slips and trips so it's necessary to keep floors well maintained as well as clean and passageways or any areas where staff might walk should be kept free from any obstructions or **obstacles**.

Manual Handling

You need to pay great attention to things which you lift in the kitchen, especially as certain items can be extremely heavy and/or difficult to **manoeuvre**. Never push, pull or drag heavy items as you might suffer from a musculoskeletal injury. Where items are heavy, ask a colleague to help you lift them and, if it's still too heavy, use a lifting device in addition to following basic health and safety guidelines on how to lift objects.

Cuts

You need to take great care when using knives in the kitchen and also beware of glass objects. You need to follow safe **procedures** when using knives and other sharp kitchen utensils and when handling items made of glass as both can cause severe damage in the form of cuts.

Exposure to Hot and Harmful Substances

Oil and other fluids such as water are commonplace in kitchens and it's important that you take extreme care when working with or in close **proximity** to hot liquids. Always ensure they are covered when not directly working with them and be careful when carrying any pans or containers with hot liquids in which could splash and **scald** either yourself or fellow workers. The HSE also publishes safe procedures for things like opening steam doors and the draining and cleaning of fat fryers, for example. Other substances which can be harmful are cleaning materials which, if handled incorrectly, can cause skin rashes and conditions such as dermatitis. Even handling certain foods can cause dermatitis and other skin conditions such as eczema and these are some of the more common causes of absenteeism within the catering and hospitality industry.

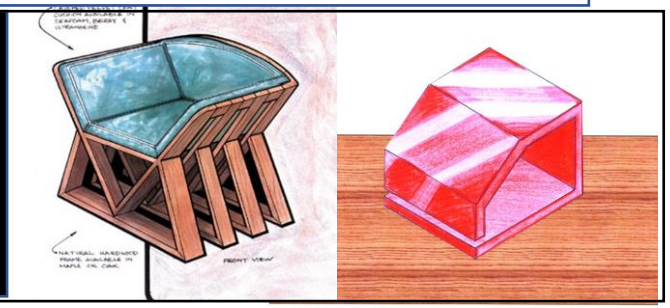
Task

On a sheet of lined paper, you will now need to answer and complete the following tasks/questions. This needs to be done neatly and in full sentences, please also write out the question before you answer.

1. In the article above there are several words highlighted in red, these are key words and it is important you understand what they mean. Using a dictionary, find the definitions of the words in red.
2. Who is responsible for enforcing the health and safety regulations?
3. State 3 businesses that need to follow the health and safety regulations?
4. What is the most common injury in a kitchen and why?
5. What sign should be placed on a wet floor and why?
6. What should you never do with heavy items and why?
7. What two cutting methods should be used to reduce the risk of injury?
8. Explain the bridge and claw methods when chopping foods.

Rendering in isometric

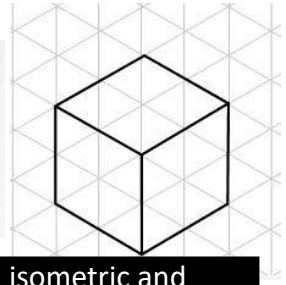
Isometric rendered well tells us what materials to use when making and shows us what a final idea will look like



1. PRACTICE: Try to make the squares below look like the material….

Wood Metal Stone

Plastic Fabric Glass



3. EXTENSION: Try to write your initials in isometric and rendered in 2 different materials…

2. APPLY: CREATE 6 isometric cubes on your page and make them look like some of the following materials:

Wood, Glass, Ice, Jelly, Stone, Bricks, Slime, Steel, Gold, Diamond, Grass, Soil, Fur, Plastic,

Lesson 5

What skills do I want to develop?

Why are these skills important and how will I develop them?

Product designing skills:
What tech are you currently in:

What would you like to make – if you had free choice to start something new next lesson – and why?

Sketches and annotations showing what I would like to make in the future and how I will manufacture my product.

Evaluation and problem solving. What do you feel you would need to find out before making your product?

Lesson 6

Exam style question

Name and describe each of the 6 R's:

1……
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This is worth 12marks.

Use sketches and notes to design a product that is made from recyclable products that could be fund around the home. Your design should include:
Details of the product.
Two different recycled materials (minimum)
Neat sketches and notes.

This is worth 6 marks.

Use sketches and notes to design a fashion item made from upcycled textiles. Your design should include:
Details of the product.
Two different recycled materials (minimum)
Neat sketches and notes.

This is worth 6 marks.

Lesson 7

Design 3 of your own skateboards

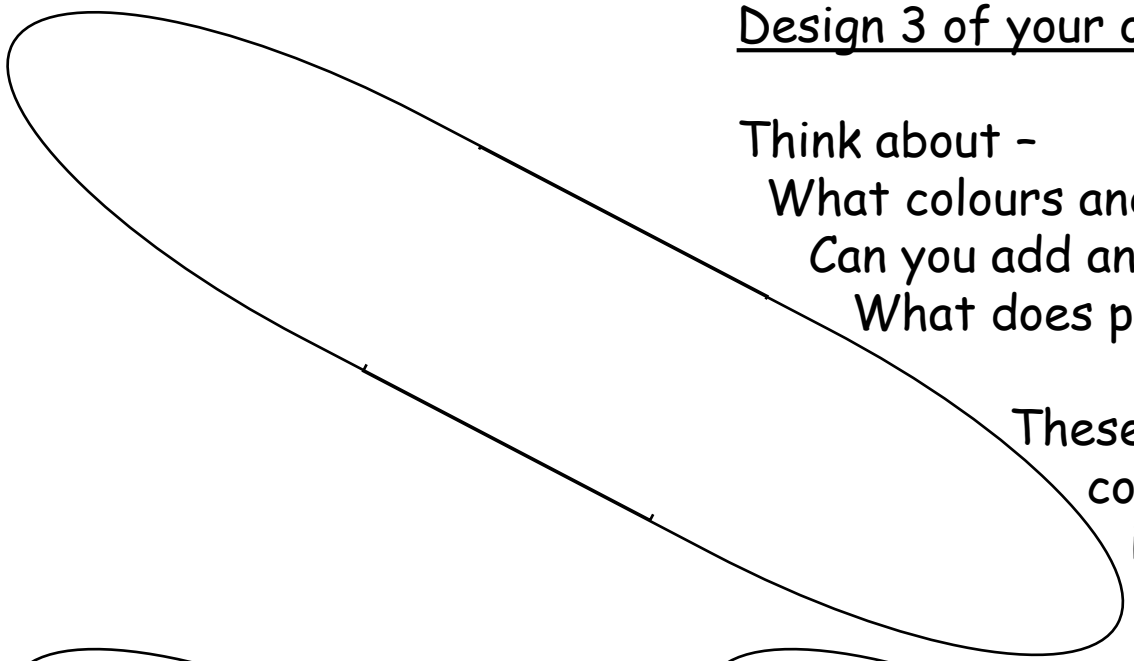
Think about –

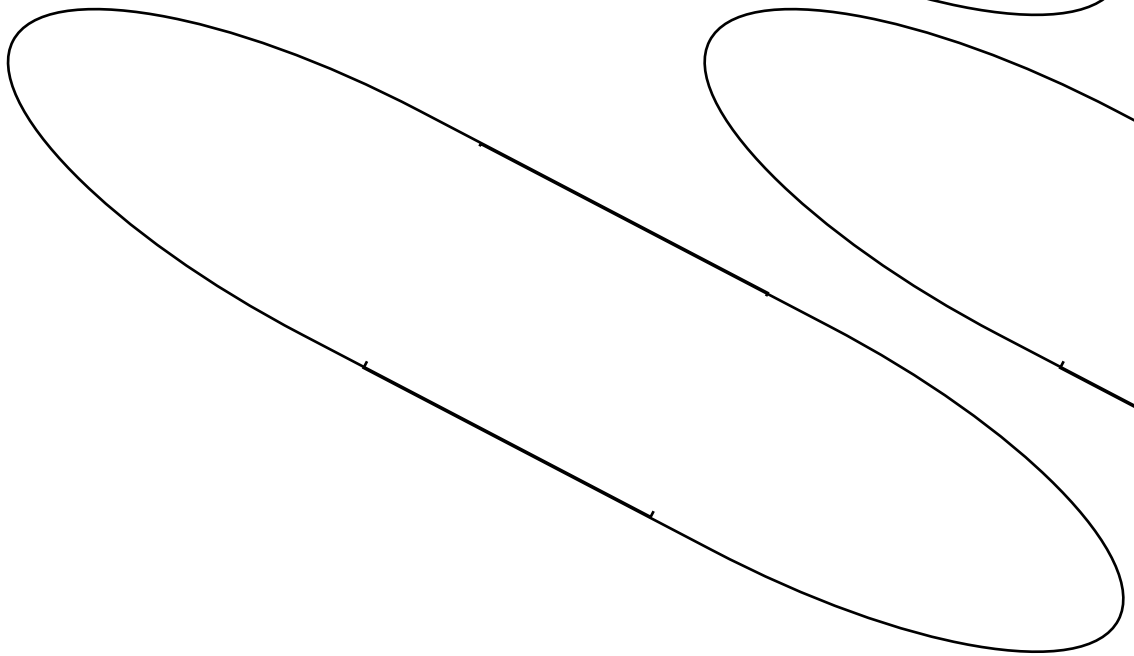
What colours and textures you can add?

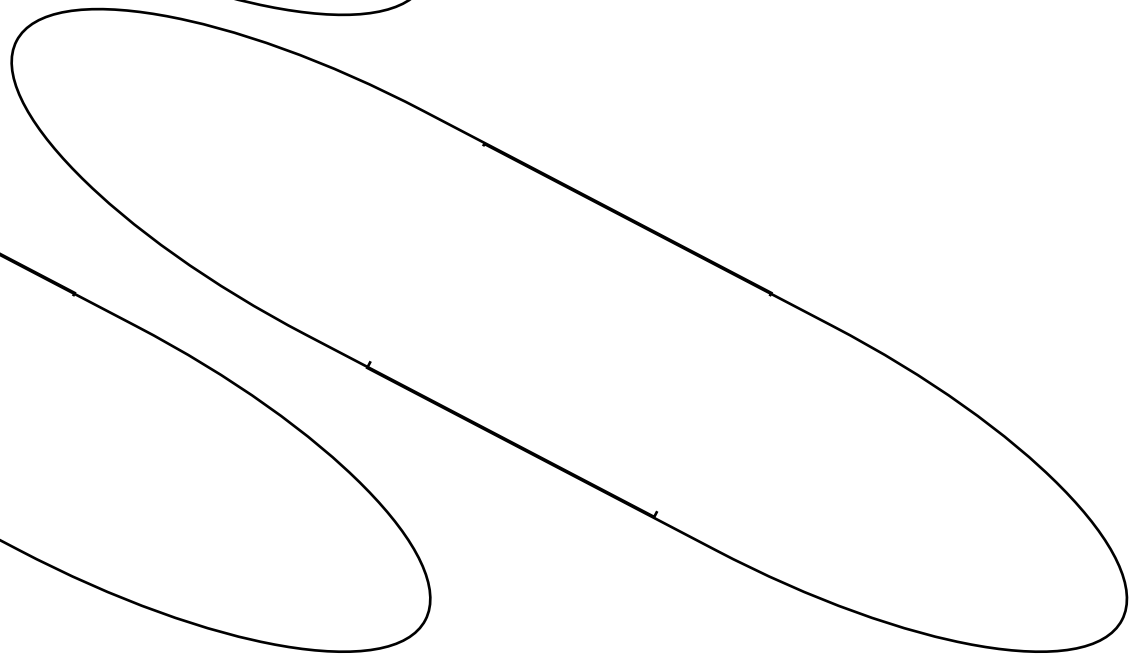
Can you add any CAD?

What does personalisation mean?

These must be neat and well coloured. Include important information in your annotations.







Complete the Drawing

Comfy chair

Aerodynamic car

Using a pencil only, draw the missing halves of these four objects. Include shading, surface texture and reflection. The borders indicate the size of the final drawing.

Radio/CD player

Toy box

POP ART SHOE DESIGN

Task-Design the textiles print for a converse trainer.
The design must include **pop art typography**.
This must be inspired by **Pop art** and artist and designers such a Andy Warhol and Roy Lichtenstein. Think bold bright colours!!!!

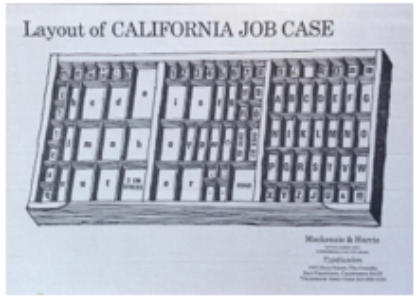
SPOTS, DOTS, COLOUR,
VIBRANT AND EYE CATCHING

Read this first:

Typefaces and font: a very, very brief history

So *why* are fonts differentiated from typefaces?

It goes back to the days when pages of text were manually printed with block letters. Specific letter sets were created, each with its own unique look, and these sets became known as *types*. Each variation of a type, such as condensed and bold, had its own box. These variations became what we know today as fonts.



Typeface vs. font: what's the difference? Does it matter?

A typeface is the same thing as a font, right? Not exactly. Although the words are often used interchangeably, there's a difference between a typeface vs. font. And it's a nuanced difference that can sometimes be confusing.

Typefaces and fonts are as important in design and branding as they've ever been, and understanding these terms' historical meanings as well as current applications enables you to accurately articulate what you want in a design. In this article we'll go over the differences between typeface vs. font and what the terms mean so you can use these terms effectively and look like a pro!

Typeface vs. font—what's the difference?

While a typeface is a set of design features for letters and other characters, a font is the variation in weight and size of a typeface. A font family is a group of related fonts.

It can get a bit granular. So, we'll go over what each term means.

What is a typeface?

A typeface is a set of design features for letters and other characters, like the presence or lack of a serif, the letters' weight and balance, spacing and the height difference between upper and lowercase letters.

Designing Typeface

1. Create visually literal fonts that **visually describe the word you are writing**.

HARD	SOFT
ROUGH	SMOOTH
WOODEN	METALLIC
FLOAT	SINK
NEAT	SMUDGE
COLD	HOT
LIGHT	DARK

2. Use the boxes below to create your typeface opposites. E.g. cold and hot.

Review your text.

WWW _____

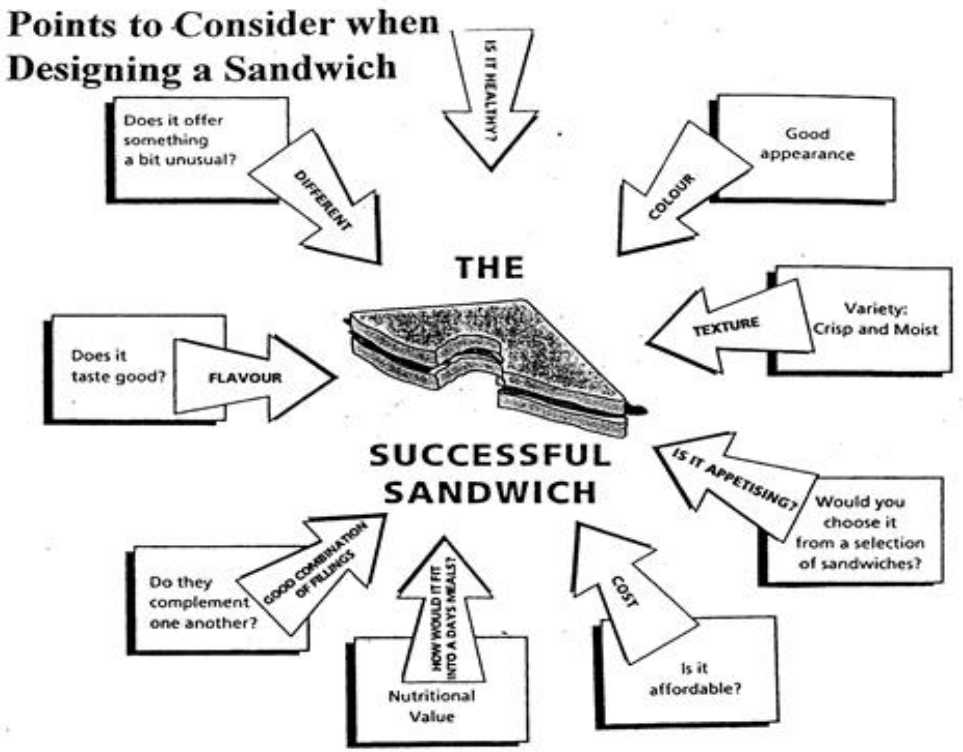
EBI _____

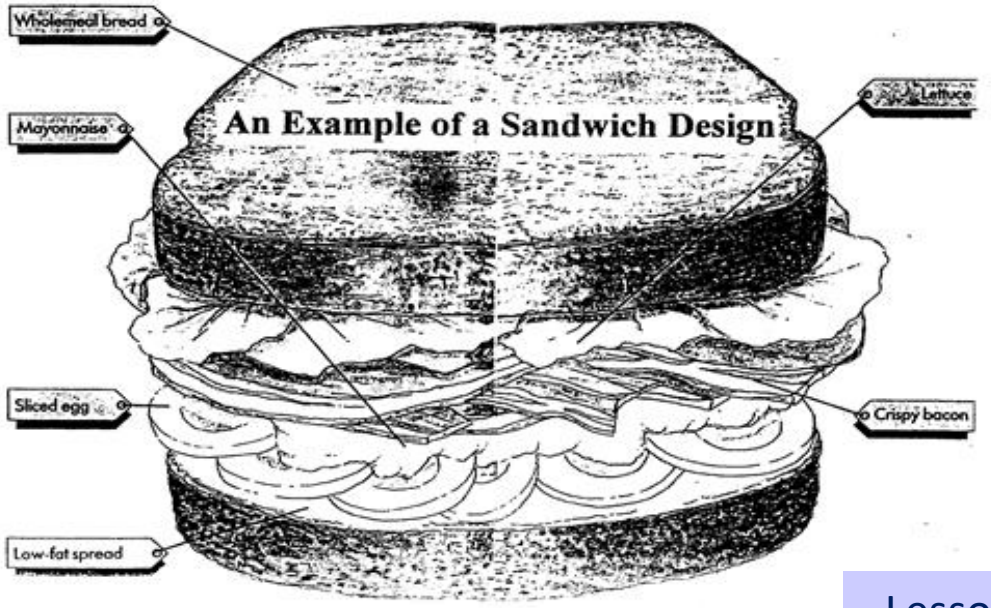
Extension: create another pair of typeface but take note of the EBIs from the first set.

Lesson 11

Design & make task

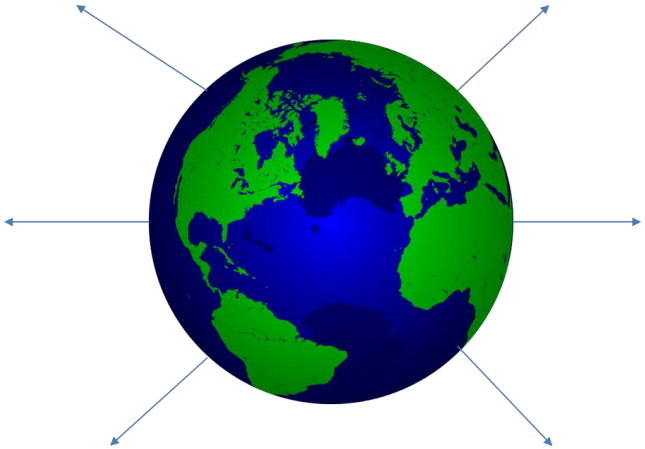
- Design a sandwich that is influenced by breads and ingredients from other countries.
- Your product could be a fusion of several countries.
- Your sandwich must include all of the food groups on the Eatwell Guide
- You must think about the 8 government guidelines





Add the different countries, their breads and ingredients associated with the country onto the diagram of the world

Possible countries to use as a source of ideas for sandwich design



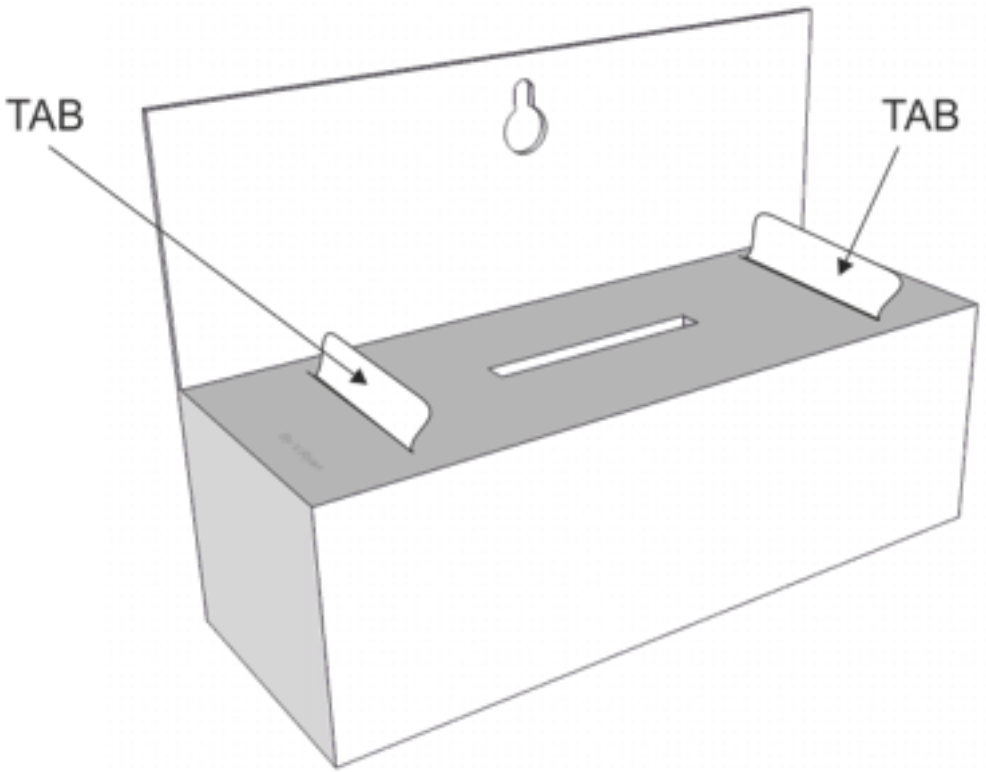
Lesson 12

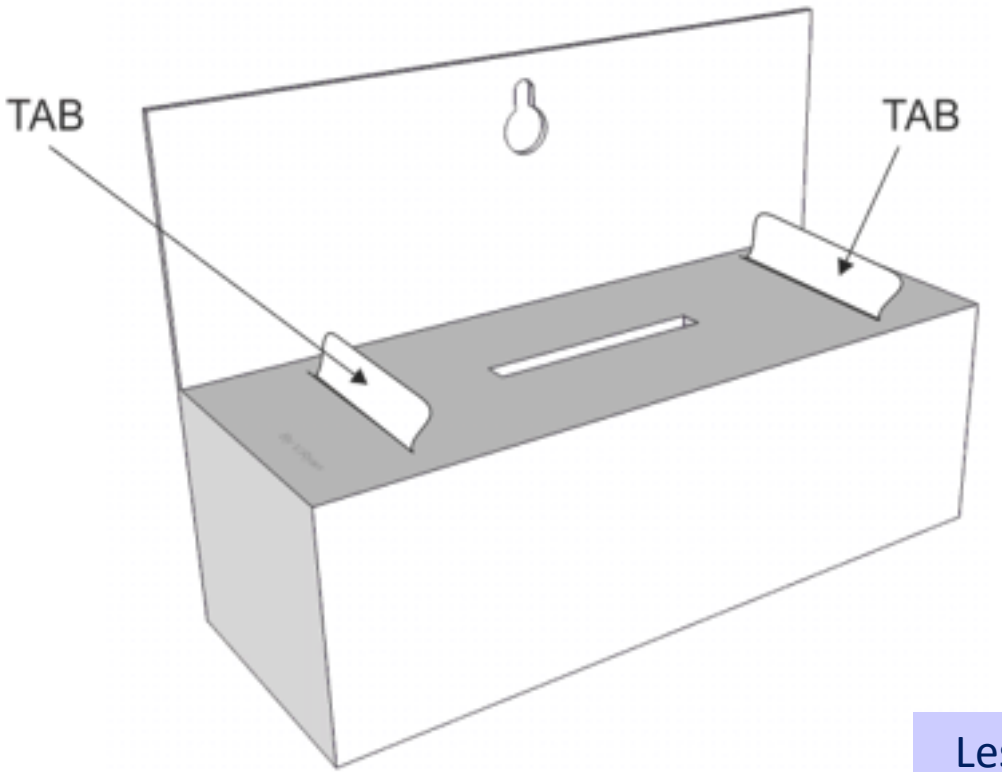
Create a design for the charity collection box below. You need to include one of the logos below and then use their brand identity to add pattern, colour, lettering, logo. Think carefully about where you position design work and lettering so it is the right way up when folded into 3D. You can choose to design the box (3D) or the net (2D 'unfolded box').

National Trust

action for children

WORLD WILDLIFE FUND





Design a popcorn box for the famous cinema snack. Look at the mood board and add anything you like to the research box. Then, design fonts that are appropriate for the popcorn box. Then, choose the best font and design onto the net (2D 'unfolded' box).

Research box

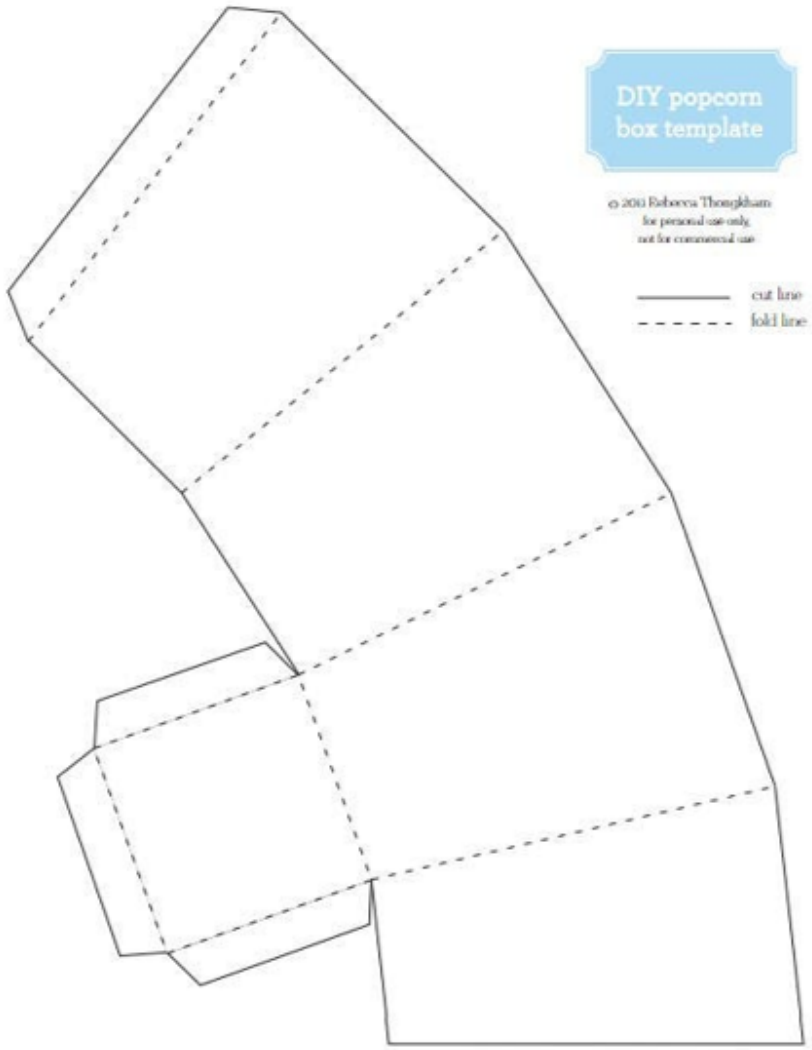
Font design 1

Font design 2

Font design 3

What design are you taking forward and why?

Final Design



Lesson 14

Nutrition

Everyone eats food. Some people eat lots of fruit and vegetables, others may eat more or less meat, and some people may eat healthy, but others do not. All of it is related to nutrition. **Nutrition** is the process of how people get the food that is needed to grow strong and healthy along with obtaining the necessary vitamins and nutrients to help bodies grow and function.

For children, good nutrition is especially important and it is necessary to eat healthy foods because kids are constantly growing. Good nutrition will lead to healthy bones and muscles, and without receiving the correct vitamins and nutrients while growing, a child will not grow as tall and as strong as they could be.

There are many aspects of nutrition including knowing about the different food groups, understanding calories, and learning about the different vitamins, nutrients, and minerals a body needs, and what to avoid.

There are five main food groups that should be eaten each day. Eating a variety of foods in each group will lead to receiving most important nutrients to remain strong and healthy. The first food group includes **grains** such as breads, cereals, pasta, and rice. The second food group is **dairy**, which includes milk, cheese, yogurt, and other dairy products. Apples, oranges, grapes, bananas, and much more are a part of the third food group, **fruits**. Of course, **vegetables** is in its own food group as well. There are many, many vegetables available to eat including beans, broccoli, peas, carrots, corn, and others. Finally, the fifth and final food group is **protein**, which can be found in beef, chicken, eggs, nuts, fish, and pork.

The portion size of each food group is not the same. For example, it is recommended that a person eat slightly more vegetables and grains than fruit and protein for each meal. There are also other guidelines on how to eat healthier, some of which includes drinking skim milk instead of whole milk, water instead of sugary drinks, and eating wheat bread instead of white bread.

Calories are a measure of the amount of energy in food items. Calories are necessary to eat to get the energy needed to play, work, and move around. The calories get burned off during movement, so eating will replenish them. But if a person eats more calories than they burn, the excess is stored as fat. There are also some foods that contain empty calories, meaning they have very little nutritional value such as solid fats and sugars.

There are many healthy foods to eat in order to receive the vitamins and minerals needed. For example, vitamin A is found in milk and helps keep the immune system healthy; Vitamin C is found in oranges and other vegetables, which is good for blood vessels, teeth, healing, and the brain. Vitamin D and calcium is great for healthy bones and can be found in milk. Iron is needed for the blood and is available in red meat, poultry, fish, and leafy vegetables. These are just a few of the minerals and vitamins that keep a person heathy.

In summary, good nutrition leads to good health. When a person wants to lose weight, it can be done by eating healthier and exercising regularly. Nearly all foods contain some of the vitamins and minerals needed for the body, but it is also important to eat the right amount of foods from the five food groups: grains, dairy, fruits, vegetables, and protein.

Task

On a sheet of lined paper, you will now need to answer and complete the following tasks/questions. This needs to be done neatly and in full sentences, please also write out the question before you answer.

1. In the article above there are several words highlighted in red, these are key words and it is important you understand what they mean. Using a dictionary, find the definitions of the words in red.
2. Why is it most important for children to eat healthily?
3. State the five main food groups and give 6 examples of foods from each.
4. Which two food groups are needed in the largest amounts?
5. How is the energy in food measured?
6. What happens when more calories are eaten than burned off?
7. What is needed for good bones and teeth? And why?

Lesson 15

Notes and extra pages

Notes and extra pages