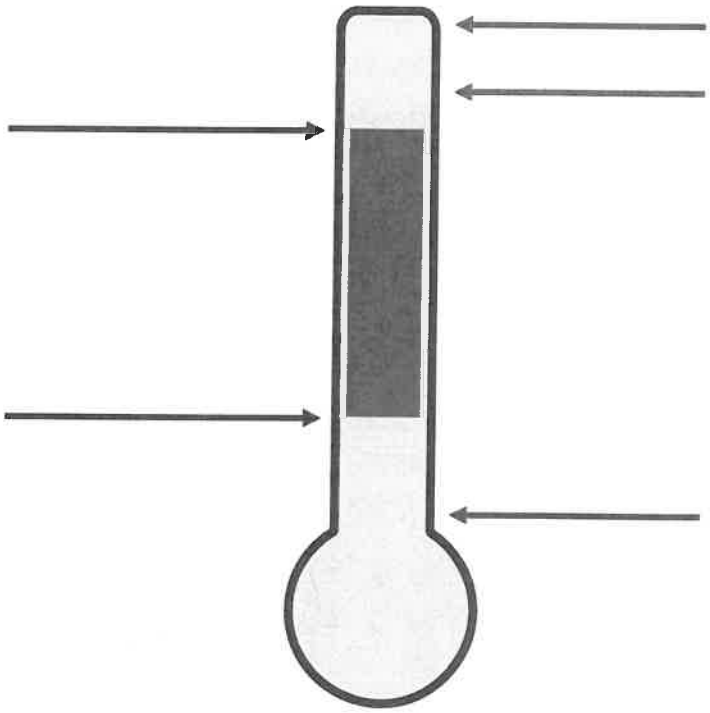
Food

Danger Zone

1. **Label** the **critical temperatures** on the thermometer.
   You should include:

The Danger Zone
Temperature water boils at
Temperature of cooked food
Temperature water freezes at



2. What happens to bacteria at **freezing** temperatures? _____
3. What happens to bacteria above **75°C**? _____
4. What are the **four conditions** bacteria need to multiply?

   _____ _____ _____ _____

5. What is the **scientific term** for how **bacteria multiply**?

   _____

6. Describe **high risk** foods:

   _____

7. Describe **low risk** foods:

   _____

8. Give four **examples** of **high risk** foods:

   _____ _____ _____ _____

9. Give four **examples** of **low risk** foods:

   _____ _____ _____ _____

10. **Discuss** the ways you could **prevent bacterial growth**:

    _____

    _____

    _____

    _____

    _____

    _____

Lesson 1e: Danger Zone

To show progress today I could ...

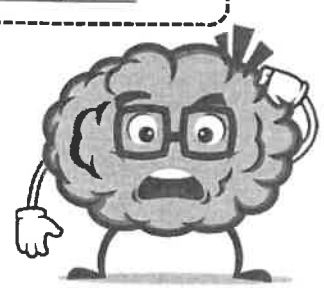
Accurately identify critical temperatures linked to food poisoning **bacteria**, e.g. the **'Danger Zone'.**

Describe how **bacteria multiplies** and **identify** high/low **risk foods.**

Knowing all this, I am able to **suggest** ways to **store** and **prepare** food safely to **prevent bacterial growth.**

Danger Zone: temperature range of 5-63°C in which bacteria grows rapidly

Binary Fission: how bacteria reproduce and multiply



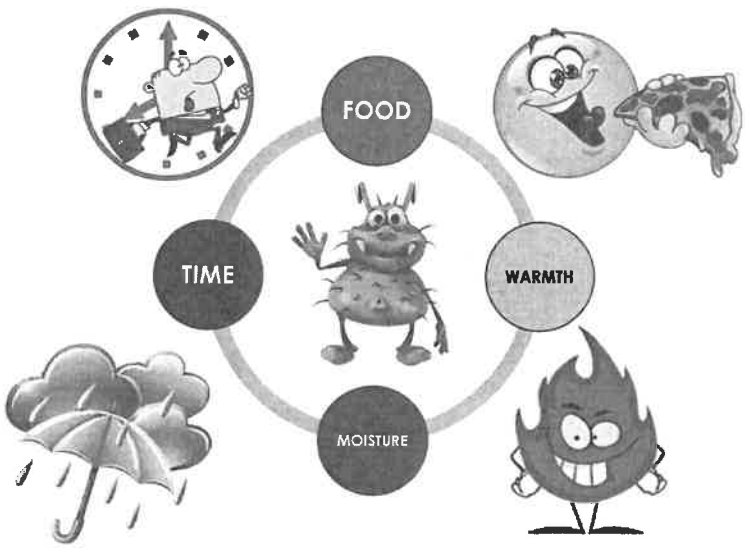
Lesson Plan

Think Task:

What 4 things do humans need to grow?

Discuss with the person next to you.

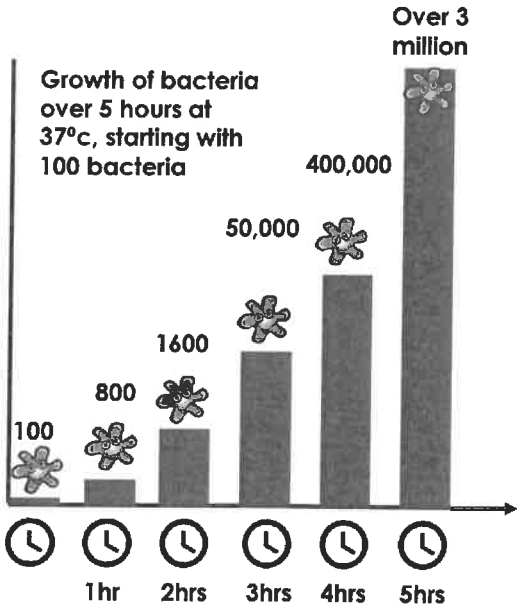
Bacteria need 4 things to grow:



Binary Fission

How bacteria grows:

Bacteria reproduce by **binary fission**. In this process the **bacterium**, which is a single cell, divides into two identical daughter cells. **Binary fission** begins when the DNA of the **bacterium** divides into two (replicates).

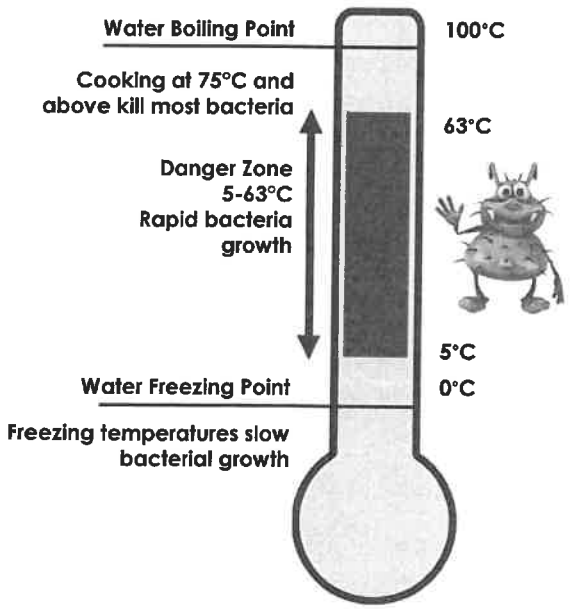


The Danger Zone

The temperature range within which the multiplication of most foodborne **pathogenic** bacteria is possible.

5°C to 63°C

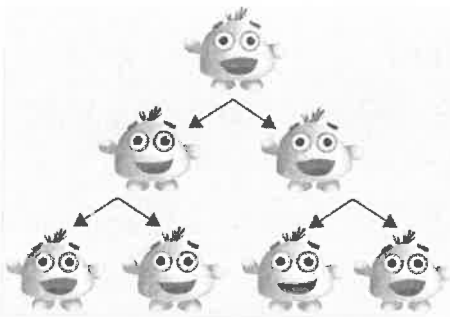
Most rapid multiplication occurs between **20°C and 50°C.**



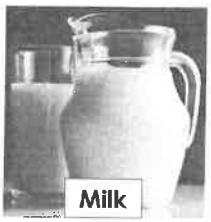
High Risk Foods

These foods **support** the **multiplication** of harmful **bacteria**.

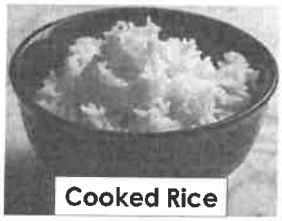
These foods are usually **high** in **protein** and **moisture**.



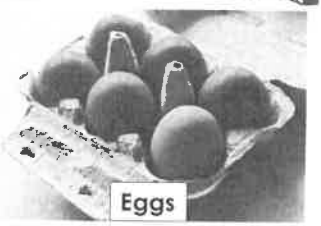
Chicken



Milk



Cooked Rice



Eggs

Low Risk Foods

Bacteria are **not able to multiply** in dry food or food containing high concentrations of sugar, salt, acid (vinegar - pickled) and other preservatives.

They are stored in **cool dry** places.

Cereals

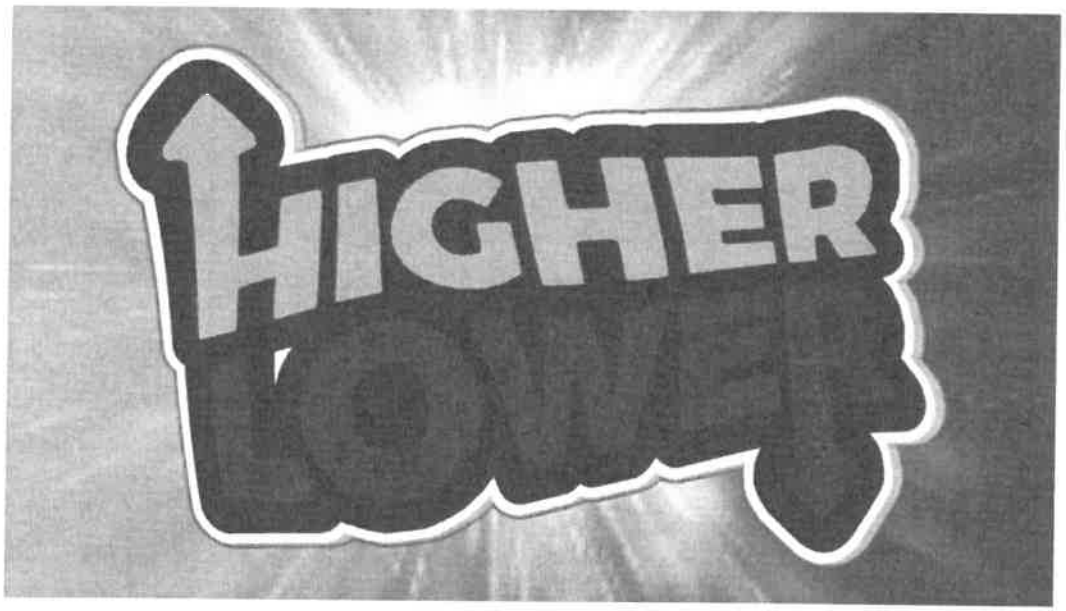
Dried Pasta

Bread

Biscuits

Jam

Tinned Food



Low risk

Because its not cooked,
no moisture.

High Risk

It is ready to eat, high in moisture and high in protein.

Low risk

It is not high in moisture and low protein.

High Risk

It is ready to eat, moist and high in protein.

High Risk

It is ready to eat, moist and high in protein.

High Risk

It is ready to eat, moist and high in protein.

Low Risk

As long as it stored correctly.

It is not ready to eat.

1. High risk foods
2. Low risk foods
3. Danger zone
4. Binary Fission
5. Temperature
6. Protein
7. Moisture
8. Sugar
9. Salt
10. Acid (vinegar)

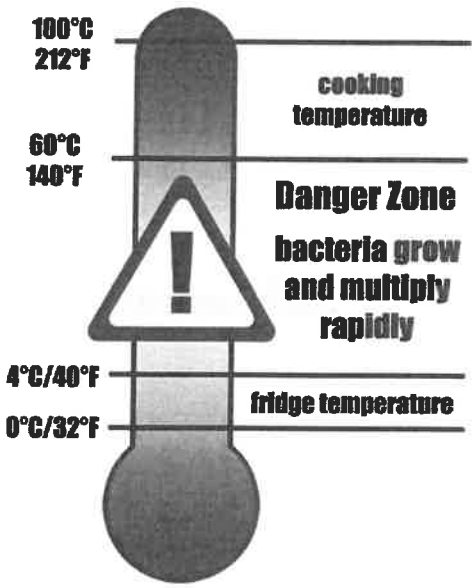
Task: Try and use each of the terms in a sentence.

E.g. **High risk** foods are usually high in **protein** and **moisture**.

Homework

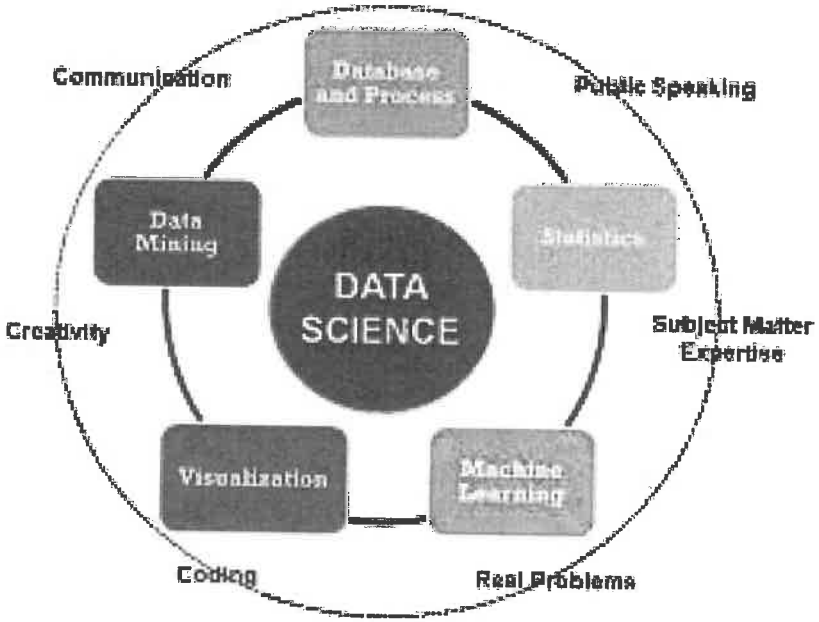
Create a **'Danger Zone'** sign for your Food Technology room fridge.

It must feature the **critical temperatures** in **°C** and be **accurate**.



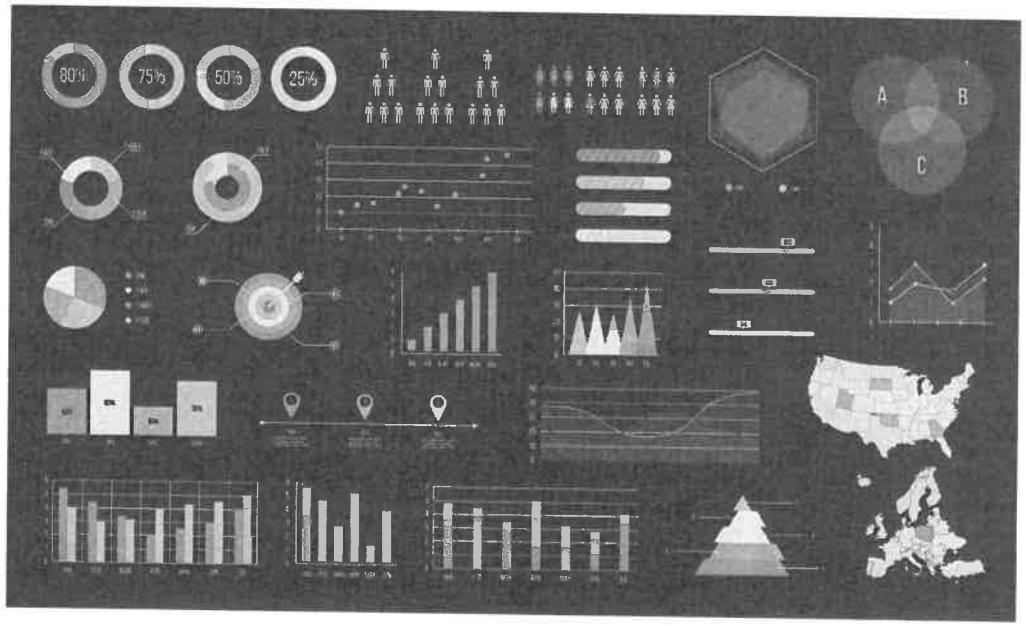
Deadline: Your homework is due in:

Different types of data



Visualization data

- Data visualization is the graphic representation of data. It involves producing images that communicate relationships among the represented data to viewers of the images. This communication is achieved through the use of a systematic mapping between graphic marks and data values in the creation of the visualization



Challenge Task:

Year 7

Name: _____ **Form:** _____

Design Task:

Choose a piece of clothing in your wardrobe (picture it!). Design 3 ways of reusing and recycling the product.

What is the difference between reusing and up cycling?

_____

_____

_____

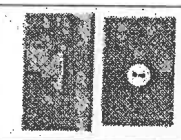
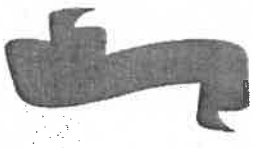
Challenge Task:

Year 7

Name: _____ **Form:** _____

Theory task:

There are many different ways that a textile product can be fastened, complete the following

Picture of fastening	Name the fastening and explain how it works	Name somewhere this is used
		
		
		
		
		
		
		

Explain which fastening above you like best and why:

_____

_____

_____

_____

_____

_____

Challenge Task:

Year 7

Name: _____ **Form:** _____

Design task:

Recycling

What am I learning: Understand how waste products (clothes we don't want any more) can be reused to make desirable items	Include a front and back view	Task What am I doing: Design a dress from recycled products, choose a piece of clothing, redesign it into some thing new and exciting, label your work with fabrics and accessories, give reasons for choice

Challenge Task:

Year 7

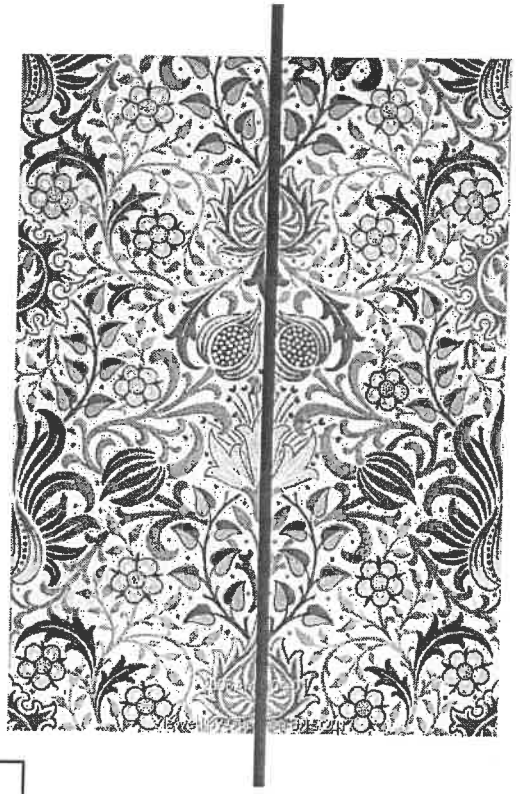
Name: _____ **Form:** _____

Design Task: symmetry – Reflection

To the left is a wall paper design by William Morris called 'Persian Wallpaper' you can see how the section is repeated by **reflection**, this is called **reflective symmetry**

Task: copy the reflection to the left, use a pencil first, then colour the design in.

Tip: use a ruler to help plan out the work, looking at where the follower and leaves should go



Challenge Task:

Year 7

Name: _____ **Form:** _____

Design task: Finding an identity

Design a logo for a clothes shop that you are about to open

The logo should:

Reflect the image if the company
Be original and exciting
Be easy to reproduce
Be attractive
Be suitably coloued

Now:
Aim to create 5 versions of your design
Try different colour schemes
Tyr different styles of font
Change the shape the logo fits into
Mirror the name
Increase or reduce the size of the logo
Turn the letter round

Think about it:
What other adaptions could you make to your logo

Challenge Task:

Year 7

Name: _____ **Form:** _____

Design task:

Use the template design a suitable top for a school fashion show.

Think about the colours and annotate your design (the fabric you would use and the reasons why)