

Reading— VIPERS

Retrieval:

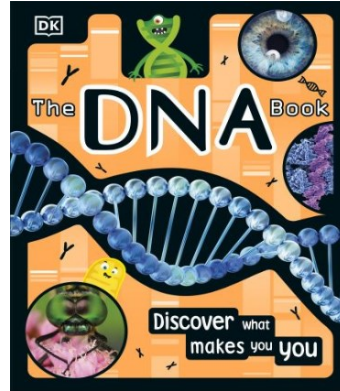
- 1) List two elements that make molecules.
- 2) What two molecules are said to help you use DNA?
- 3) Name the shape of DNA.
- 4) What is compared to a tiny, complicated machine?
- 5) How big is a human's biggest chromosome?

Vocabulary:

- 1) Explain what the phrase 'very similar' means.
- 2) Find and copy a phrase which shows how important proteins are.
- 3) What does it mean for something to 'pair' with something else?

Inference:

- 1) Do you think this makes for an interesting extract? Why?



Mental Maths

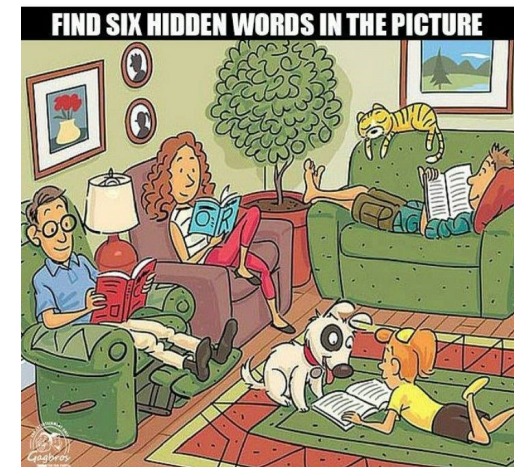
- | | | |
|----------------------------|----------------------------|----------------------------|
| 1) $25 \times 10 =$ _____ | 2) $100 \times 9 =$ _____ | 3) $13 \times 100 =$ _____ |
| 4) $10 \times 43 =$ _____ | 5) $22 \times 100 =$ _____ | 6) $10 \times 64 =$ _____ |
| 1) $12 \times 100 =$ _____ | 2) $9 \times 100 =$ _____ | 3) $100 \times 18 =$ _____ |
| 4) $100 \times 25 =$ _____ | 5) $100 \times 32 =$ _____ | 6) $43 \times 100 =$ _____ |

- 1) **630** is **10x** **100x** bigger than **63**
- 2) **4700** is **10x** **100x** bigger than **47**
- 3) **170** is **10x** **100x** bigger than **17**
- 4) **280** is **10x** **100x** bigger than **28**
- 5) **3400** is **10x** **100x** bigger than **34**
- 6) **900** is **10x** **100x** bigger than **9**
- 7) **500** is **10x** **100x** bigger than **50**
- 8) **4700** is **10x** **100x** bigger than **47**

Spelling

Practice spelling these words which we have looked at this week. Find a fun way to show off your spellings. It could be in bubble writing or with-in pictures

calendar
particular
complete
increase
consider
describe



Pick a challenge to complete this week.

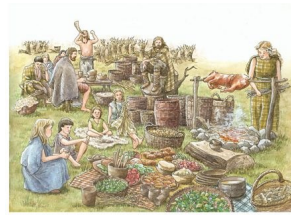
French

Find out the birthdays of as many people in your family and write them down in French. Try and find out the day they were also born on. E.g Jeudi 13 Juin 1991.



History

Research the different foods that people in the Iron Age would have eaten. Then design a menu using the information that a family would have eaten.



Science

Identify the different traits that you have inherited from your family. E.g What traits did your mom get from her mom and dad. Have you inherited any of these traits?



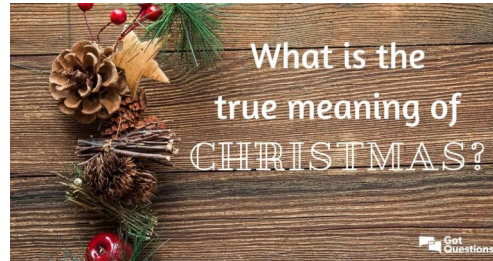
Art

Choose one of the spelling words from this week and create your own piece of graffiti art.



RE

Create a poster that shows what the true meaning of Christmas is for Christians.



PE

Create your own break dance routine, using the different moves you have learnt in our PE sessions. Get an adult to video this to send into school.



Year 5's
Home Learning

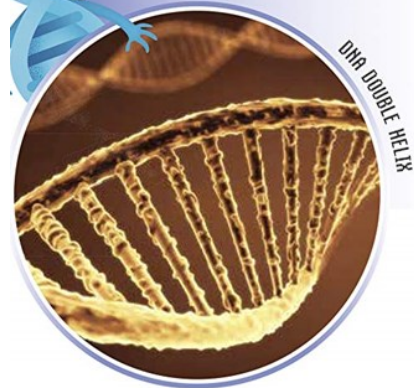
Homework due back on
Wednesday 20th November 2023

Meet the molecules

Molecules are groups of elements, such as carbon and oxygen, bonded together. DNA is a **big molecule**. To use DNA, you need the help of more molecules, including **RNA** and **proteins**.

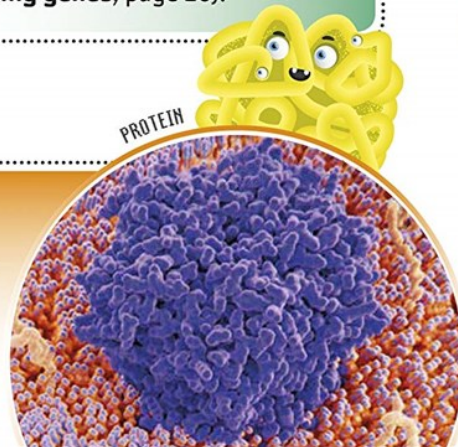
DNA

The DNA molecule looks like a ladder twisted into a spiral – a shape known as a double helix. The double helix is in fact made up of two strands, held together by chemicals called bases, which form the rungs of the ladder.



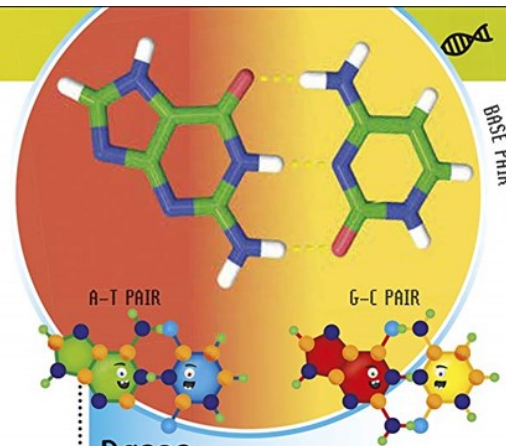
RNA

Ribonucleic acid (RNA) is very similar to DNA, but it is only half of a double helix. It's used to make a temporary copy of the DNA sequence when a gene is used (see **Using genes**, page 20).



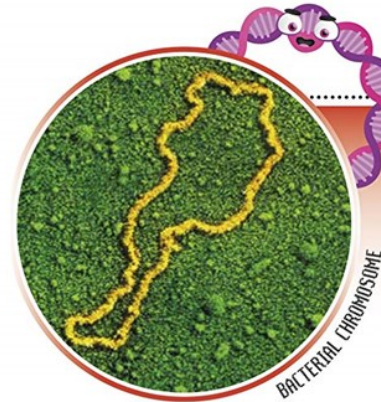
Proteins

DNA is the instruction manual of the cell, but proteins do all the work! Proteins allow cells to do all the things they need to do to keep our bodies working. They often act as tiny – but very complicated – machines.



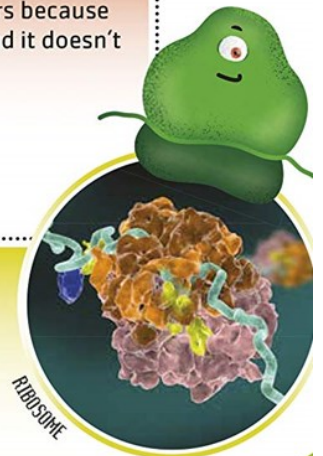
Bases

The bases in the rungs of the DNA ladder come in four types and spell out the DNA code. There is adenine (A), which pairs with thymine (T) in the double helix, and cytosine (C), which pairs with guanine (G).



Chromosomes in bacteria

Bacteria only have one chromosome. It's very different from ours because it makes a loop or ring, and it doesn't live inside a nucleus.



Ribosomes

Ribosomes are tiny factories inside the cell that make proteins. RNA copies of genes are delivered to ribosomes. There, they are decoded to make the correct protein.

Chromosomes

Each chromosome contains one continuous molecule of DNA. Our biggest chromosome is 249,956,422 bases (A, T, C, G) long. If you were to write all the letters out in a book like this, you'd need 16,597 books just for that one chromosome!

