

Cells & Reproduction Homework Wk 1



This Homework requires **GRAPH PAPER!**



In your jotter write the DATE in the margin.

Now add a TITLE for your homework.

Your title should be the name of the Homework: Cells & Reproduction Homework Wk 1

Question 1.

Look at the table showing the growth of a baby in the uterus.

weeks of pregnancy	length of baby (cm)
7	30
15	205
20	460
40	600

- How many times larger was the baby at 40 weeks compared with 7 weeks?
- Use the information to predict the size of the baby at 30 weeks of development.

Question 2.

The table shows the length of pregnancy for a variety of mammals.

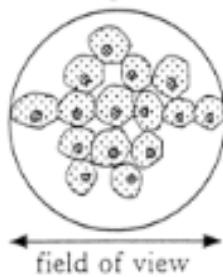
<i>Mammal</i>	<i>Pregnancy length (weeks)</i>
Mouse	3
Dog	9
Pig	16
Human	38
Horse	48
Elephant	84

Increasing body mass ↓

- Present this information as a bar graph
- What is happening to the length of the pregnancy as the body mass increases?
- How many times longer is the pregnancy of the horse compared to that of the pig?

Question 3.

The diagram below shows some human cheek cells as they appear when viewed through a microscope.



The diameter of the field of view of the microscope is 120 micrometres.

Calculate the average width of a human cheek cell.

Question 4.

A student carried out an investigation into the effect of temperature on the growth of yeast cells. The results are shown in the table below.

<i>Temperature (°C)</i>	<i>Number of yeast cells at start (per mm³)</i>	<i>Number of yeast cells after 2 hours (per mm³)</i>
10	50	60
20	55	100
30	50	560
40	45	140

What change could the student make to make their experiment a fair test?

- A Use the same number of yeast cells at the start
- B Repeat the experiment
- C Count the number of yeast cells after one hour
- D Use a wider range of temperatures

Question 5.

The table below shows the results of an investigation into the effect of temperature on egg laying in adult red spider mites.

<i>Feature</i>	<i>Temperature (°C)</i>		
	20 °C	25 °C	30 °C
Average length of egg laying period (days)	24	18	12
Average number of eggs laid per female during egg laying period	72	72	72

As the temperature increases, the average number of eggs laid per female per day

- A increases
- B decreases
- C stays the same
- D halves



A marking guide for this Homework is available (password required).