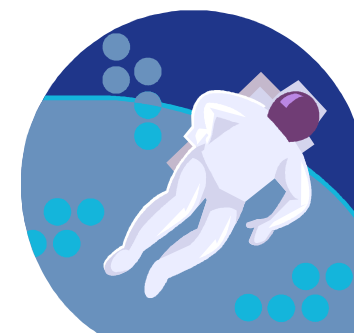




# **IVC KS3 Science Answer Booklet**

**10 4 10**

**Levels 5-7**



**10 minutes a day for 10 days = 10 4 10**

Hopefully you have been working hard to prepare for your KS3 Science SATs exams on 9<sup>th</sup> May. This pack has 10 tasks to help boost your revision. Each task has 2 activities which should take you 10 minutes to complete. The tasks will help you keep science fresh in your mind so that you don't forget what you have been practising in recent lessons. Once you have completed a task, you will be able to check your answers with a friend. If you get stuck ask a friend or a teacher.

**GOOD LUCK!**

**Name:** .....

**10 4 10 answers L5-7**

**TASK 1**

Straight-line graph through origin

30s

200cm<sup>3</sup>

37.5s (allow 35 – 40s)

Line extrapolated to give 90s

The larger the volume of sand the longer it takes to go through the funnel

Same funnel and sand poured into funnel in same way.

Sperm and eggs

Identify males and females with quagga features

Breed

Choose offspring with most obvious quagga features

Breed etc

**TASK 2**

T,F,F,F,F,T,T,F,F,T,T,T,F,F,T,F,T,T,T,F

Less/closer

Same

Higher

Less

Same mass, lower volume means density of air increases

**TASK 3**

Graph drawn using maximum possible amount of grid, sensible scales (0 to 500 and 0 to 30), volume on x axis, time on y axis, points correct, and line of best fit drawn.

Relationship is best described by sentence ( C )

complete, conductor or metal, series, parallel, series, stop working, parallel, work (normally).

A all go out

B stay on

**TASK 4**

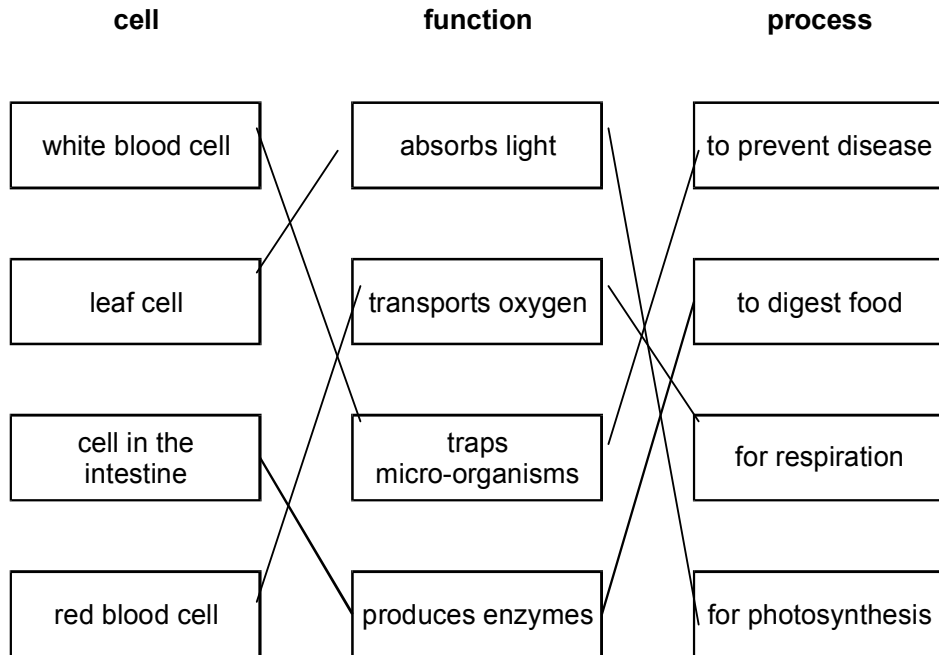
The bean plant gets taller as time passes

The bigger the mass the longer the spring

As the amount of pesticide increases, the thickness of the eggshell increases at first, to a maximum, and then decreases.

a) i) Cell membrane  
Cytoplasm

ii) Chloroplast, cell wall



**TASK 5**

Set C because the two repeats are closer together than in Set B. As there is no repeat of results in Set A it is not possible to tell how reliable they are.

- a) .....+ hydrochloric acid .....+ hydrogen  
copper is less reactive/does not react
- b) sulphuric c) copper sulphate and magnesium chloride

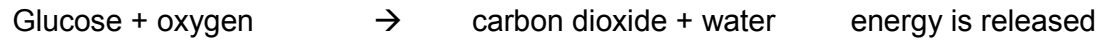
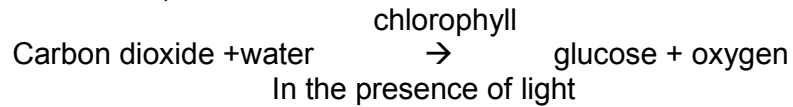
**TASK 6**

Y,N,N,N,Y,N,Y,Y,N,N,N

- 1a) A F  
A  
E
- b) Gravity  
Friction
- c) Kinetic Thermal Sound

**TASK 7**

- A i) Less competition – any answer referring to specific example eg more light, water etc.
- ii) less light/ water/ nutrients
- b) increase
- c)



During the day, photosynthesis and respiration occur so carbon dioxide is made and used up. At night, no photosynthesis so carbon dioxide level increases.

**TASK 8**

Graph with suitable, sensible scale, points correctly plotted and curved line of best fit

- D
- C
- A
- B

- b) B
- E
- C

**TASK 9**

Temperature or volume/mass of water

Group 2 at 50C. Decreases.

Graph drawn, points correct. Line of best fit anomalous point ignored.

Ai)  $50 \times 1.5 = 75\text{Nm}$

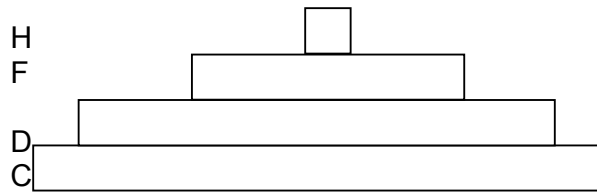
ii)  $F \times 0.1 = 75$

$F = 750\text{N}$

b) Electromagnet switched on, core becomes magnet, attracts iron counterweight.

**TASK 10**

Length of pencil	length of shadow
OK	OK
Volume of acid	OK
Type of surface	OK
OK	Pulse rate
OK	OK



Heron eats lots of fish, fish eat lots of daphnia, daphnia eat lots of chlamydomonas

Through placenta

milk