

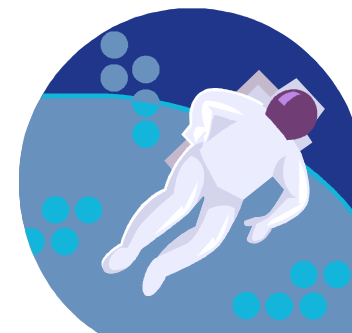
SCIENCE SAT 2007)



# **IVC KS3 Science Answer Booklet**

**10 4 10**

**Levels 3-6**



**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:** .....

### TASK 1

Straight-line graph through origin

30s

200cm<sup>3</sup>

37.5s (allow 35 – 40s)

line extrapolated to give 90s

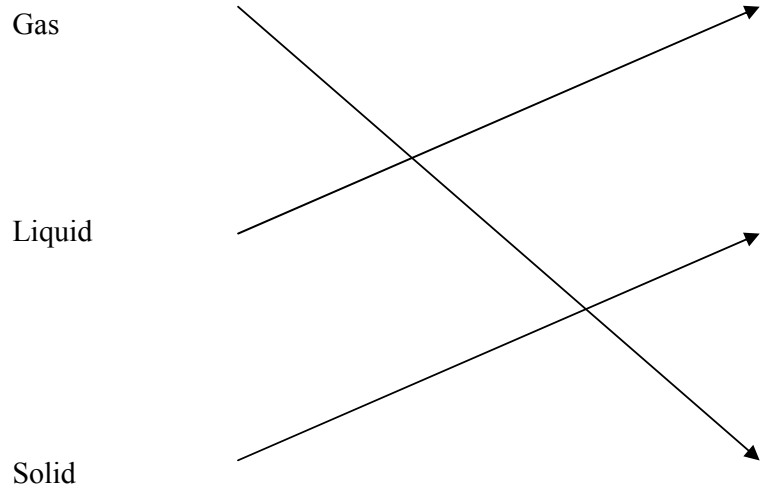
CYTOPLASM	AREA OF THE CELL WHERE CHEMICAL REACTIONS TAKE PLACE
PHOTOSYNTHESIS	A CHEMICAL REACTION WHICH USES LIGHT AS AN ENERGY SOURCE
CHLOROPHYLL	GREEN PIGMENT WHICH ABSORBS LIGHT ENERGY
NUCLEUS	CONTROLS CHEMICAL REACTIONS WITHIN THE CELL
CHLOROPLAST	WHERE PHOTOSYNTHESIS TAKES PLACE.
CILIATED CELL	FOUND IN BREATHING TUBES, THEY HELP SWEEP OUT RUBBISH
OESOPHAGUS	A MUSCULAR TUBE WHICH CONNECTS THE MOUTH AND STOMACH
PANCREAS	PRODUCES DIGESTIVE ENZYMES AND INSULIN
RESPIRATION	A CHEMICAL REACTION BETWEEN GLUCOSE AND OXYGEN TO RELEASE ENERGY
MEMBRANE	ALLOWS MATERIALS TO MOVE IN AND OUT OF THE CELL

With thanks to LONGSANDS COLLEGE (KS3 SCISCIENCE SAT 2007)

**TASK 2**

	E	Q	U	A	T	I	O	N
		U	N	I	T			
		A	M	M	E	T	E	R
		N	E	W	T	O	N	
M	E	T	R	E				
	K	I	L	O				
		T	I	M	E			
P	H	Y	S	I	C	S		

With thanks to LONGSANDS COLLEGE (KS3 SCISCIENCE SAT 2007)



Evaporation P

Melting R

Liquid

Carbon

Hydrogen

Carbon Dioxide (or CO<sub>2</sub> - if formula is correct)

With thanks to LONGSANDS COLLEGE (KS3 SCISCIENCE SAT 2007)

### TASK 3

Graph drawn, sensible scales, points correct, and a line of best fit drawn

( C )

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

A all go out

B stay on

### TASK 4

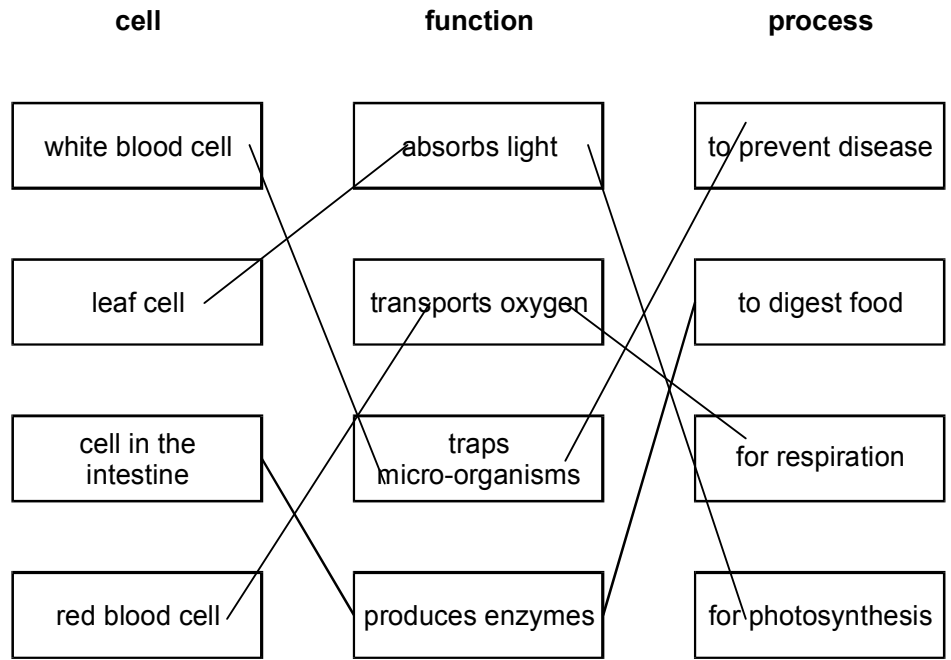
The bean plant gets taller as time passes

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                      ii)    b) Chloroplast, cell wall  
    Cytoplasm

With thanks to LONGSANDS COLLEGE (KS3 SCISCIENCE SAT 2007)



**TASK 5**

The length of a corridor in the school		A tape measure
Your body temperature		A clinical thermometer
Different volumes of water from 10 to 100cm <sup>3</sup>		A measuring cylinder of 100cm <sup>3</sup> volume A tape measure
The length of a woodlouse		A 30cm ruler showing mm
Your mass		Bathroom scales
The current in a circuit		An Ammeter
The weight of an apple		A Newton meter

K		reacts violently with water
	Iron	an element we need in our diet
	Sulphur	a yellow non-metal
N	Nitrogen	
Au	Gold	

	Sodium chloride	the salt we eat
CO <sub>2</sub>		gas that turns limewater milky
	Water	liquid all living things need
HCl		acid found in the stomach
	Copper sulphate	blue crystals

With thanks to LONGSANDS COLLEGE (KS3 SCISCIENCE SAT 2007)

### 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

Digestive oesophagus, stomach, liver, pancreas, small intestine, large intestine  
Circulatory Heart, arteries, veins,  
Respiratory Lungs.

With thanks to LONGSANDS COLLEGE (KS3 SCISCIENCE SAT 2007)

### 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 50 °C . Decreases.

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

- i) 12.5m/s
- ii) Equal/same

forward bigger/backward smaller

With thanks to LONGSANDS COLLEGE (KS3 SCISCIENCE SAT 2007)

### TASK 10

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

4g  
gas and water  
solvent

(a) alkali (b) indicator (c) solute (d) solvent