IEA - Data Enhancement Project

Questionnaire printing

Study: SC2

Population: 1

Instrument: STB_1

Student Science Achievement Test (1B) Population 1

1 A balloon is placed over the mouth of a bottle. The bottle is then heated by placing it in a dish of hot water. After a short time the balloon gets bigger.

[Picture of Before heating] [Picture of During heating]

Why does the balloon get bigger?

- A The air in the bottle expands.
- B The air in the bottle contracts.
- C The air pressure inside the bottle decreases.
- D The air pressure outside the bottle decreases.
- E The glass bottle expands.

P1B01

- 2 A magnet is hanging by a piece of string. The magnet always stops with one end pointing to the North. What causes this?
 - A gravity
 - B light
 - C heat
 - D magnetism
 - E energy

P1B02

3 The graph below shows the progress made by an ant moving along a straight line. If the ant keeps moving at the same rate, what will

be its distance at the end of 30 seconds?

Time in seconds

0 5 10 15 20 25 30 35

P1B03

4	What is t	the Sun?
	A	a planet
	В	a star
	C	a comet
	D	a moon
	E	a meteor
P1B		
5	When this	s caterpillar [Picture] becomes an adult, what will it
	[5 0	diagrams: cricket, butterfly, bat, grasshopper, frog]
	А	Diagram 1
	В	Diagram 2
	С	Diagram 3
	D _	Diagram 4
	E	Diagram 5
 P1B	305	
6	When a person sees something, what carries the message from the eyes to the brain?	
	A	arteries
	В	glands
	C	muscles
	D	nerves
	E	veins
P1E	306 	
7	A baby chick grows inside an egg for 21 days before it hatches. Where does the baby chick get its food before it hatches?	
	A	It is fed by the mother hen.
	В	It doesn't need any food.
	C	It makes its own food.
	D	It uses food stored in the egg.
	E	It eats the egg shell.
P1E	307	

- 8 Where do metals like aluminium and iron come from?
 - A dead trees
 - B water
 - C animal bones
 - D rocks
 - E oil wells

P1B08