Test: (F) Primary 4 Science (Term 3) - Henry Park
Points: 14 points
Name: $\qquad$
Date:
Signature: $\qquad$

Select multiple choice answers with a cross or tick:Only select one answerCan select multiple answers

## Question 1 of 15

Study the table below.

| Sample | Shape | Good conductor of heat |
| :---: | :--- | :---: |
| F | Takes the shape of the container | Yes |
| G | Does not take the shape of the container | No |
| H | Takes the shape of the container | No |
| $J$ | Does not take the shape of the container | Yes |

Which one of the following identifies a sheet of aluminium foil and air correctly?
(1)
(2)

| A sheet of aluminium foil | Air |
| :---: | :---: |
| $F$ | $G$ |
| $J$ | H |
| $H$ | $G$ |
| $F$ | J |A) 1B) 2C) 3D) 4

Stacy poured hot water into plastic cup S. Another plastic cup T was placed upside down over the cup of hot water, as shown below. The set-up was placed in an air-conditioned room with temperature of about $20^{\circ} \mathrm{C}$.


Which one of the following is most likely to occur?A) The hot water will lose heat to cup SB) Cup S will gain heat from the surroundingsC) Cup T will lose heat to the hot water and expandD) The hot water will gain heat from the surroundings

Peter was standing behind a wooden panel, as shown in the diagram below.


Which one of the following explains why Peter was not able to see the bucket?A) The wooden panel is not a light sourceB) The bucket did not reflect light from the lampC) The bucket did not allow light to pass throughD) The wooden panel did not allow light to pass through

A wooden object was placed between a piece of tracing paper and a screen, as shown in the
diagram below. diagram below.


Which one of the following shadows will be seen on the screen when the torch is switched on?
(1)

(2)

(3)

(4)
A) 1B) 2C) 3D) 4

Peter wants to make a bookshelf as shown below.


The table below shows some properties of four materials, A, B, C and D.

| Material | Strong | Flexible |
| :---: | :---: | :---: |
| A | $\times$ | $\checkmark$ |
| B | $\checkmark$ | $\times$ |
| C | $\times$ | $\times$ |
| D | $\checkmark$ | $\checkmark$ |

( $r$ - has the property, $x$ - does not have the property)
Which one of these materials, $A, B, C$ or $D$, is most suitable for making part $X$ of the bookshelf?A) AB) BC) CD) D

## Question 6 of 15

Which one of the following objects are made from materials that come from plants?
A: paper cup
B: metal pipe
C: rubber hoseA) A onlyB) A and B onlyC) A and C onlyD) B and C only

The diagrams below show four different animals at its young and adult stage. Which one of the following animals goes through a 4-staged life cycle?
(1)

| Animal | Young | Adult |
| :---: | :---: | :---: |
| Beetle | Mrutrexj5 |  |
| Frog |  |  |

(3)
(4)
Grasshopper
A) 1
B) 2
C) 3
D) 4

Joan wanted to find out if substance $Y$ found in flask $E$ was solid, so she overturned the flask as shown below.


Explain why substance Y is likely to be a solid.

## Question 9 of 15

Draw to show how substance $W$ will appear in the tilted container if it is a liquid.


Please type "done" to proceed to the next question

Liquid and gases have mass and occupy space. State another common property of liquid and gases.

Kathy bought a cup of coffee each from two different cafes, Cafe A and Cafe B. The two cups of coffee were served in paper cups with sleeves. The diagram below shows the sleeves from the two cafés.


The side view of the sleeve is shown below.


State the purpose of using the sleeve.

## Question 12 of 15

Based on your answer in (a), which sleeve, A or B, allows Kathy to hold the cup of coffee longer? Give a reason for your answer.

Cafe C served its coffee in a foam cup without the use of any sleeves. The table below shows the length of time Kathy was able to hold the cup of coffee before she found it too hot to hold.

| Cup | A | B | C |
| :---: | :---: | :---: | :---: |
| Length of time Kathy was <br> able to hold the cup (min) | 10 | 7 | 20 |

Based on the table above, in which cup would the coffee reach room temperature first? Explain why.

The diagrams below show three shapes, a square, a triangle and a circle, each made of a different material.


The diagram below shows the side view of the three shapes hung at positions, $\mathrm{L}, \mathrm{M}$ and N .


The shadows cast on the screen are shown below.


Which shape is hung at position L? Explain your answer.

Mary set up an experiment as shown below.


Study the diagram above and fill in the blanks below with the words "nearer to" and "further from ${ }^{*}$.

In order to make the shadow on the screen bigger, Mary can
Move the torch $\qquad$ the object.

Move the screen $\qquad$ the object.

