

GUYANA  
 MINISTRY OF EDUCATION  
 NATIONAL GRADE SIX ASSESSMENT  
 2008  
 SCIENCE  
 PAPER

TIME: 1 hour 10 minutes

READ THESE INSTRUCTIONS CAREFULLY BEFORE YOU ATTEMPT TO ANSWER THE QUESTIONS.

1. **WRITE YOUR CANDIDATE NUMBER ON THE ANSWER SHEET AND UNDERLINE THE SUBJECT.**
2. This test contains 40 questions. You are required to answer **ALL** questions. Four responses are given for each question. The responses are **A, B, C** and **D**. Only **ONE** response is correct.
3. If you are not sure of the answer to a question, then choose the one which you think is **BEST**. On your answer sheet, draw a heavy black line through the letter you have chosen.
4. **BE SURE THAT THE QUESTION NUMBER IN THE BOOKLET IS THE SAME AS THE ONE YOU HAVE USED ON YOUR ANSWER SHEET.**

Here is an example done for you.

- |  |   |
|--|---|
| 1. The two gases which combine to make water are hydrogen and<br>(A) carbon dioxide.      (B) carbon monoxide.<br>(C) nitrogen.              (D) oxygen. | <b>ANSWER SHEET</b><br><br>1. <b>A B C <del>D</del></b> |
|--|---|

A heavy black line has been drawn through the letter **D** on the answer sheet because **oxygen**, the correct answer, is next to **D**.

5. If you make a mistake, erase the line cleanly, then draw a heavy black line through the letter next to the answer you have now chosen.
6. **REMEMBER**, each answer **MUST** only be shown by a heavy black line on our Answer Sheet.
7. **DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.**

How many bones are there in the human adult skeletal system?

- (A) **26** (B) **62**  
(C) **206** (D) **602**

Decayed remains of plants and animals in the soil is called

- (A) particles. (B) vegetation.  
(C) humus. (D) loam.

3. The amount of matter in an object is called its

- (A) mass. (B) weight.  
(C) volume. (D) density.

4. Which planet has shining rings of bits of ice and rock orbiting it?

- (A) **Earth** (B) **Mercury**  
(C) **Mars** (D) **Saturn**

5. Energy is defined as

- (A) being strong. (B) the ability to do work.  
(C) a force being applied. (D) being healthy.

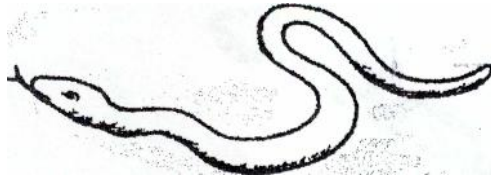
6. Which is an example of chemical energy?

- (A) **Diesel** (B) **Sun**  
(C) **Current** (D) **Water**

7. Which is a star found in our solar system?

- (A) **Moon** (B) **Sun**  
(C) **Planet** (D) **Satellite**

Study the animal below, then answer question 8.



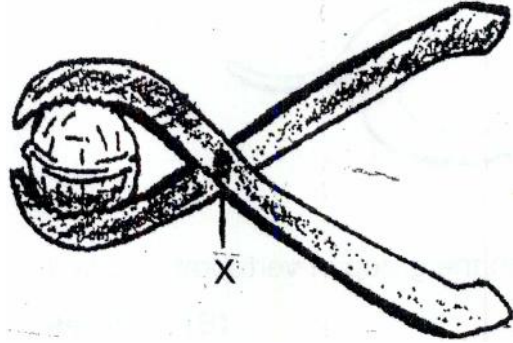
8. The animal belongs to the group of vertebrates called
- (A) amphibians. (B) fishes.  
(C) reptiles. (D) mammals.

Study the diagram below, then answer question 9.



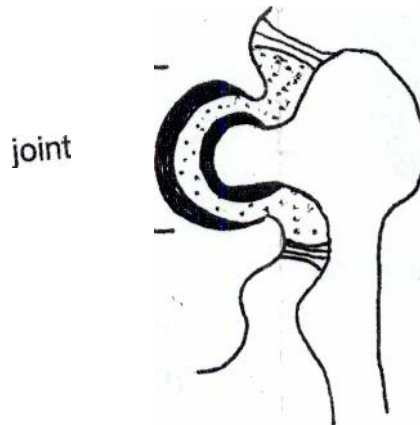
9. The part labelled X is called the
- (A) margin. (B) edge.  
(C) apex. (D) blade.
10. The chemical symbol for chlorine is
- (A) **Ca** (B) **Cl**  
(C) **Co** (D) **Cu**

Study the diagram below, then answer question 11.



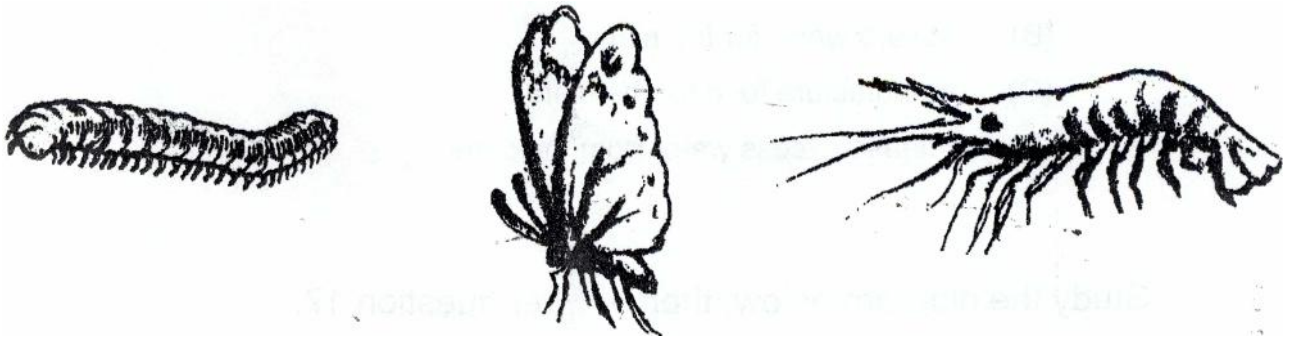
11. The part labeled 'X' is the
- |                 |             |
|-----------------|-------------|
| (A) fulcrum.    | (B) load.   |
| (C) resistance. | (D) effort. |

Study the diagram below, then answer question 12.



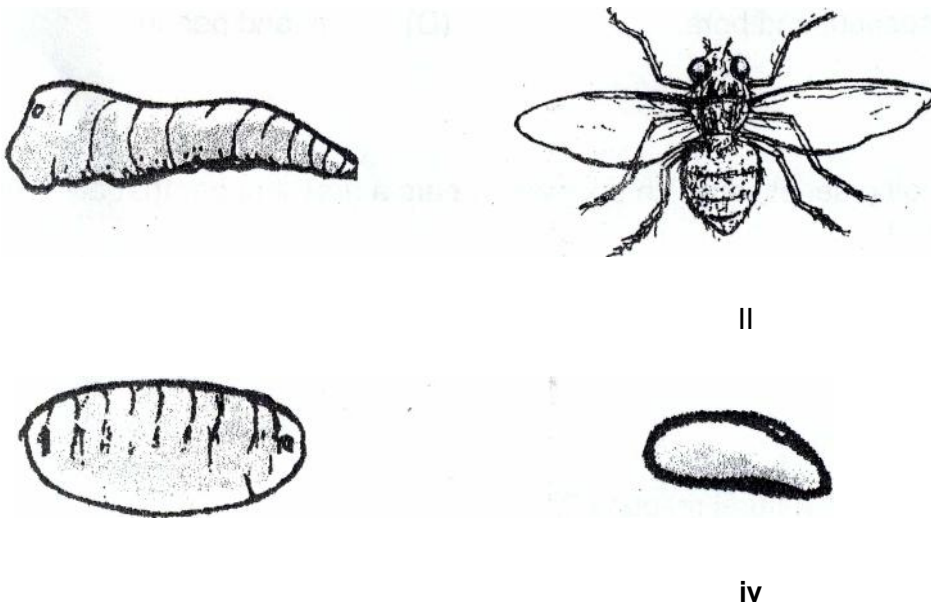
12. Which type of human joint is shown?
- |                     |                 |
|---------------------|-----------------|
| (A) Ball and socket | (B) Hinge       |
| (C) Fixed           | (D) Hand to arm |

Study the diagrams below, then answer question 13.



13. All of the organisms can be classified as
- (A) insects. (B) vertebrates.  
(C) crustaceans (D) invertebrates.

Study the diagrams below, then answer question 14.



14. Which represents the pupa?
- (A) i (B) ii  
(C) iii (D) iv
15. The organ in the body mostly affected by nicotine in tobacco is the
- (A) lung. (B) kidney.  
(C) tongue. (D) liver.

16. All of the following are functions of the leaves of plants **except** that they
- (A) take in and give out air.
  - (B) absorb water for the plant.
  - (C) manufacture food for the plant.
  - (D) release excess water from the plant.

**Study the diagram below, then answer question 17.**



17. **Two** plants that have the type of leaf shown are
- (A) corn and mango.
  - (B) corn and rice.
  - (C) coconut and bora.
  - (D) rice and peanut.
18. The feeding series in which a **kiskadee** eats a grasshopper that ate a grass plant is called a
- (A) food web,
  - (B) primary consumer,
  - (C) food chain
  - (D) secondary consumer\_
19. Which is **not** a natural resource?
- (A) Water
  - (B) Soil
  - (C) Minerals
  - (D) Glass
20. Conservation of materials is not done when
- (A) more materials than is needed are used.
  - (B) all unused materials are stored properly.
  - (C) alternative uses are made of some materials.
  - (D) pollution in the **environment** is avoided.

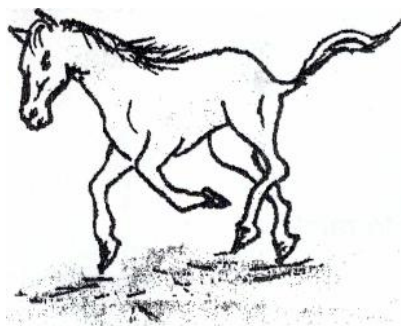
21. Surface tension allows some insects to walk on water. This is because the water particles

- (A) are larger. (B) are far apart.  
(C) cling together. (D) are very strong.

22. The moon travels around the earth. The moon can be called a/an

- (A) asteroid. (B) comet.  
(C) satellite. (D) planet.

Study the diagram below, then answer question 23.



23. The energy change which will take place when a standing horse begins to run is

- (A) heat  $\rightarrow$  potential (B) kinetic  $\rightarrow$  potential  
(C) sound  $\rightarrow$  potential (D) potential kinetic

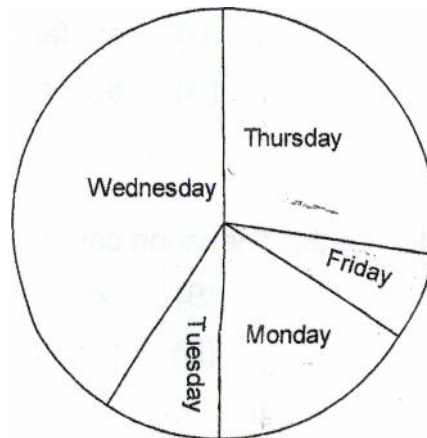
24. Which is not a source of energy?

- (A) Sun (B) Water  
(C) Heat (D) Fuel

25. In the water cycle water is not made available through the process of

- (A) evaporation. (B) condensation.  
(C) distillation. (D) precipitation.

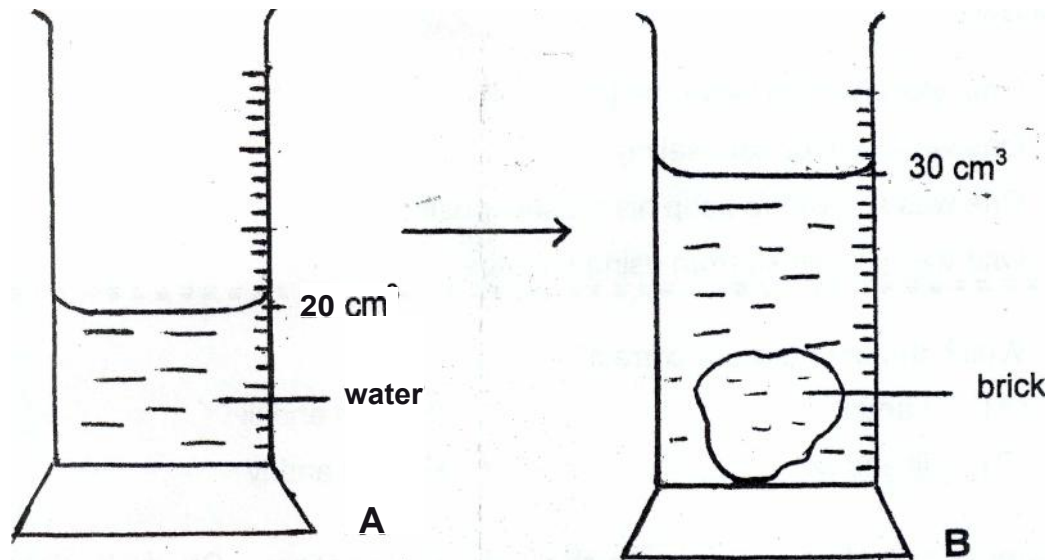
The pie chart represents the cloud cover for a period of five days. Study it, then answer questions 26 and 27.



26. Which day had the least amount of clouds.
- (A) Monday. (B) Wednesday.  
(C) Thursday. Friday.
27. On which day is it most likely to rain?
- (A) Tuesday (B) Wednesday  
(C) Thursday (D) Friday
28. Which method can be used to find out if chlorophyll is made up of more than one pigment?
- (A) Sublimation (B) Filtration  
(C) Dissolving (D) Chromatography
29. There are four containers on a table. Each contains a different metal. One metal is in a liquid form. Which metal is in a liquid form?
- (A) Mercury (B) Gold  
(C) Silver (D) Aluminium



Jan placed a brick in container A and the water level rose. Container B shows the new water level. Study the containers, then answer question 30.



30. What is the volume of the brick?

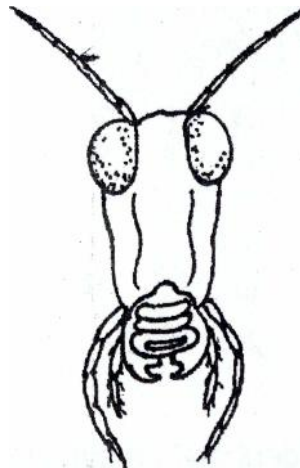
(A) 10 cm<sup>3</sup>

(B) 30 cm<sup>3</sup>

(C) 50 cm<sup>3</sup>

(D) 600 cm<sup>3</sup>

The diagram below represents the mouth part of an insect. Study it, then answer question 31.



31. This insect feeds by

(A) cutting and chewing leaves.

(B) sucking nectar from flowers.

(C) piercing the skin and sucking blood.

(D) catching and swallowing insects.

Use the information below, to answer question 32.

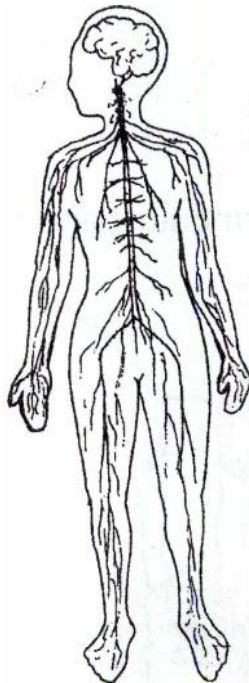
Four persons on a staff were found to be HIV positive. They were treated as follows:

- (i) One was asked to leave the job.
- (ii) One was sent for counseling.
- (iii) One was allowed to keep his present position.
- (iv) One was prevented from using facilities.

32. Which treatments were correct?

- (A) i and ii
- (B) ii and iii
- (C) iii and iv
- (D) i and iv

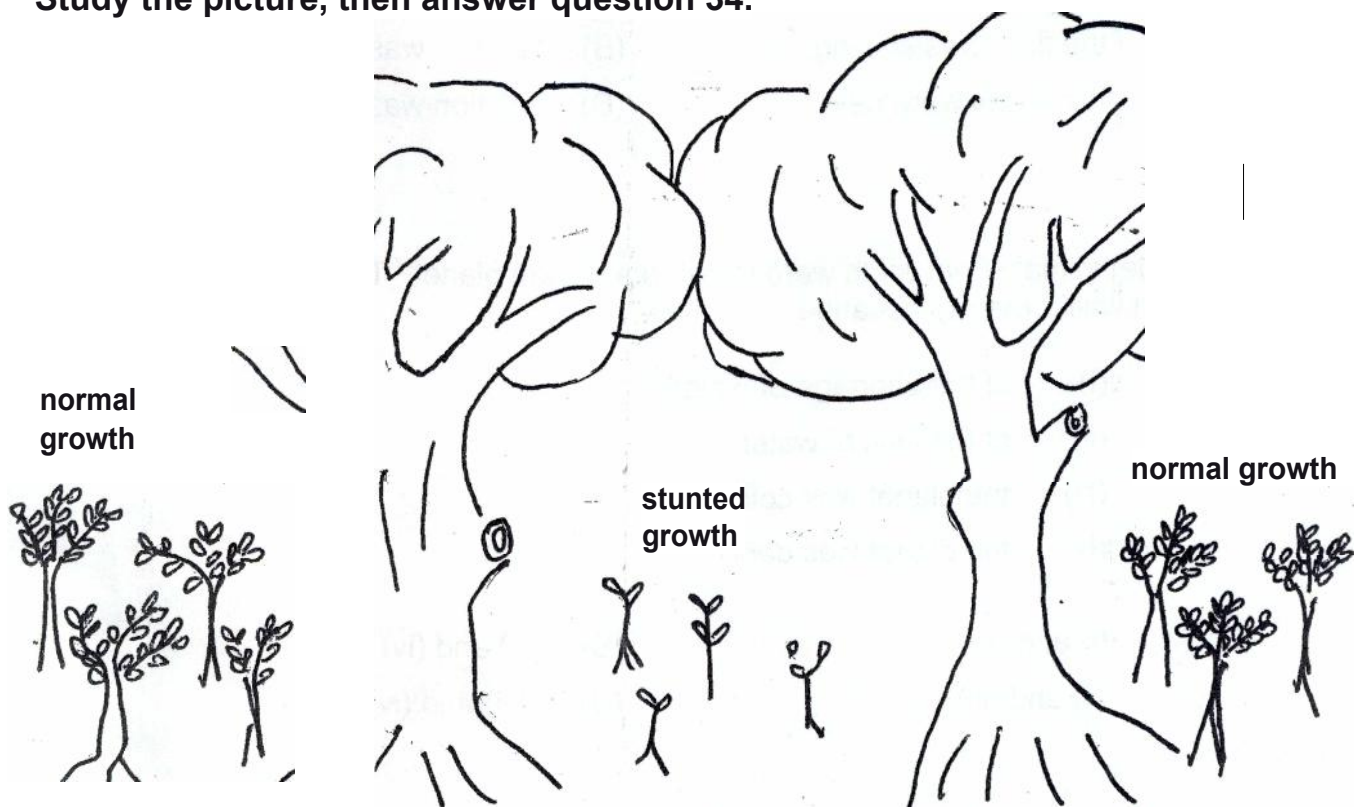
The diagram below represents the nervous system. Study it, then answer question 33.



33. Jane had a serious accident and damaged the system shown. She would most likely suffer from

- (i) inability to learn
  - (ii) loss of memory
  - (iii) inability to walk
  - (iv) loss of body fat
- (A) i, ii and iii
  - (B) i, ii and iv
  - (C) i, iii and iv
  - (D) ii, iii and iv

John planted cash crops on a plot of land as shown in the picture below. Study the picture, then answer question 34.



34. The stunted growth of the plants was most likely due to too
- (A) little water.
  - (B) little sunlight.
  - (C) much nutrients.
  - (D) much chemicals.
35. The residents of a village dumped all of their garbage in a nearby trench. This action will most likely cause
- (A) a cleaner environment.
  - (B) decrease in water borne diseases.
  - (C) decrease in mosquito borne diseases.
  - (D) flooding during the rainy season.

36. When Tom tried to walk on a polished floor wearing his new socks, he immediately slipped and fell. This happened because

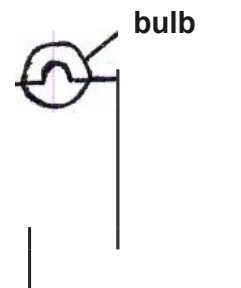
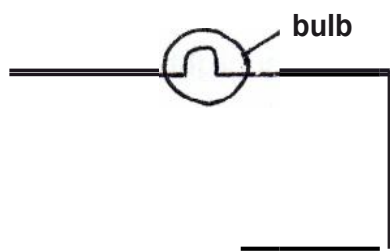
- (A) the floor was shining.
- (B) friction was reduced.
- (C) the socks were new.
- (D) friction was increased

37. Some animals from earth were taken to a distant planet. They survived only for a short while, mainly because

- (i) of the shortage of oxygen.
- (ii) of the lack of water.
- (iii) the planet was cold.
- (iv) the planet was dark.

- (A) (i) and (ii)
- (B) (i) and (iv)
- (C) (ii) and (iii)
- (D) (iii) and (iv)

The diagrams at A and B represent two circuits. Circuit B has one more cell than circuit A. Study them, then answer question 38.



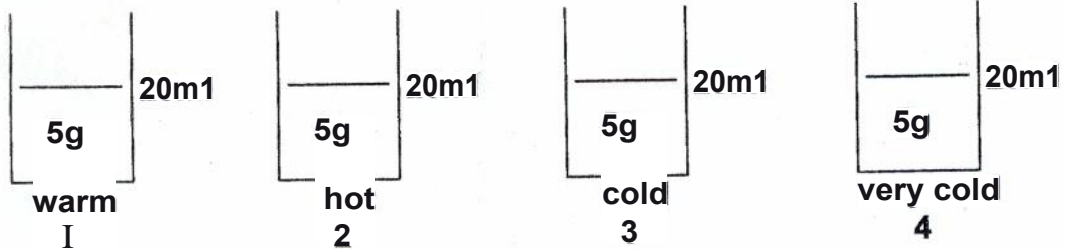
38. What would happen to the light given by the bulb in the diagram at B? It will

- (A) remain the same
- (B) become dim.
- (C) go out.
- (D) become brighter.

39. The rocks on one side of a mountain started to break-up into small pieces after most of the vegetation was removed for farming purposes. The rocks broke up because they were exposed to
- (A) sun, wind and litter.                      (B) rain, wind and sun.  
(C) litter, warmth and light.                (D) rain, humidity and clouds.

Study the information below then answer question 40.

Sam carried out an experiment by placing 5 g of sugar in 4 containers with water, at various temperatures, as shown in the diagrams below.



40. In which container would all the sugar be dissolved **first**?
- (A) 1    (B) **2**  
(C) 3    (D)

END OF TEST

GUYANA  
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 NATIONAL GRADE SIX ASSESSMENT  
 2008  
 ANSWER SHEET

**MATH ENG SS**

SC

Candidate Number

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SECTION SCORES

WRITE YOUR CANDIDATE NUMBER AND UNDERLINE THE SUBJECT YOU ARE WRITING AT THE TOP AS WELL AS AT THE BOTTOM OF THIS ANSWER SHEET.

<b>1</b>	<b>2</b>	<b>3</b>	<b>TOTAL</b>	<b>TOTAL</b>

BE SURE THAT MARKS ON THIS SHEET CAN BE EASILY SEEN.  
 ERASE COMPLETELY ANY ANSWER YOU WISH TO CHANGE.

- |                    |                    |                    |
|--------------------|--------------------|--------------------|
| 1. <b>A B C D</b>  | 15. <b>A B C D</b> | 29. <b>A B C D</b> |
| 2. <b>A B C D</b>  | 16. <b>A B C D</b> | 30. <b>A B C D</b> |
| 3. <b>A B C D</b>  | 17. <b>A B C D</b> | 31. <b>A B C D</b> |
| 4. <b>A B C D</b>  | 18. <b>A B C D</b> | 32. <b>A B C D</b> |
| 5. <b>A B C D</b>  | 19. <b>A B C D</b> | 33. <b>A B C D</b> |
| 6. <b>A B C D</b>  | 20. <b>A B C D</b> | 34. <b>A B C D</b> |
| 7. <b>A B C D</b>  | 21. <b>A C D</b>   | 35. <b>A B C D</b> |
| 8. <b>A B C D</b>  | 22. <b>A B C D</b> | 36. <b>A B C D</b> |
| 9. <b>A B C D</b>  | 23. <b>A B C D</b> | 37. <b>A B C D</b> |
| 10. <b>A B C D</b> | 24. <b>A B C D</b> | 38. <b>A B C D</b> |
| 11. <b>A B C</b>   | 25. <b>A B C D</b> | 39. <b>A B</b>     |
| 12. <b>A B C D</b> | 26. <b>A B C D</b> | 40. <b>A B C D</b> |
| 13. <b>A B C D</b> | 27. <b>A B C D</b> |                    |
| 14. <b>A B C D</b> | 28. <b>A B C D</b> |                    |

MATH                  ENG                  SS                  SC

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DO NOT BEND, FOLD OR DAMAGE THIS SHEET

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