Directions: Answer the following question(s).

1 MGSE5.G. 1 (DOK 1)
What are the correct coordinates for points $M, A, T$, and H ?

A. $\mathrm{M}(3,3) ; \mathrm{A}(6,5) ; \mathrm{T}(2,7) ; \mathrm{H}(1,9)$
B. $M(3,3) ; A(5,6) ; T(7,2) ; H(9,1)$
C. $\mathrm{M}(4,1) ; \mathrm{A}(6,6) ; \mathrm{T}(7,1) ; \mathrm{H}(10,1)$
D. $M(3,1) ; A(7,5) ; T(1,2) ; H(10,2)$

| Master ID: | 3037626 Revision: | 4 |
| :--- | :--- | :--- |
| Correct: | B |  |
| Standards: |  |  |
| MGSE5.G.1 |  |  |

2 MGSE5.G. 1 (DOK 2)
Describe how point $B$ travels along the $y$-axis.

A. Point $B$ travels 3 units in a horizontal direction.
B. Point $B$ travels 7 units in a horizontal direction.
C. Point $B$ travels 3 units in a vertical direction.
D. Point $B$ travels 7 units in a vertical direction.

| Master ID: | 3038669 Revision: | 3 |
| :--- | :--- | :--- |
| Correct: | D |  |
| Standards: <br> MGSE5.G.1 |  |  |

3 MGSE5.G. 1 (DOK 3)
a.) Jolene is going for a walk in the neighborhood. If she starts at point S, plot 3 additional points to form a rectangular path that she may have taken. Label the coordinates on the graph.

b.) If the distance from the origin to 1 on the $x$-axis is equivalent to 1 mile, determine how many miles Jolene walked.


#### Abstract

Master ID: 3037638 Revision: 4 Rubric: $\quad 2$ Point(s) MGSE5.G.1: Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., $x$-axis and $x$-coordinate, $y$-axis and $y$-coordinate).


## 2 Point Response:

The student correctly and completely answers Parts A \& B.

## Correct Response:

a.) Review the student's 3 additional points that form a rectangle on the graph. Possible responses include (6, 7 ), $(10,7)$, and $(10,5)$, or $(2,5),(2,3)$ and $(6,3)$. There are many possibilities. The student must label each point on the graph to also receive full credit for part A.
b.) To determine the number of miles Jolene walked, the student should correctly determine the perimeter of the figure made in part A. The number of miles walked for the rectangle formed by $(6,7),(6,5),(10,7)$, and $(10,5)$ is 12 miles, for example.

1 Point Response:
The student correctly and completely answers Part A ORB.
$0 \quad 0$ Point Response:
The student incorrectly answers Parts A \& B.
Standards:
MGSE5.G. 1

Directions: Answer the following question(s).

4 MGSE5.G. 1 (DOK 3)
What would happen to the direction that Point B travels, in regards to both axes, if you reverse the order of the $x$-value and the $y$-value?


Directions: Answer the following question(s).

5 MGSE5.G. 2 (DOK 1)
What are the correct coordinates for the park?

A. $(8,4)$
B. $(7,5)$
C. $(8,5)$
D. $(5,8)$

| Master ID: | 3037627 Revision: | 7 |
| :--- | :--- | :--- |
| Correct: | C |  |
| Standards: <br> MGSE5.G.2 |  |  |

6 MGSE5.G. 2 (DOK 1)
Bob walked 3 blocks north and 1 block west from his home. Where is he now?


A. Arcade $(8,7)$
B. Arcade $(7,8)$
C. Pool $(5,7)$
D. Pool $(7,5)$

| Master ID: | 3037635 Revision: | 3 |
| :--- | :---: | :---: |
| Correct: | C |  |
| Rubric: | 1 Point(s) |  |
| Standards: <br> MGSE5.G.2 |  |  |

Directions: Answer the following question(s).

7 MGSE5.G. 2 (DOK 2)
A frog hops from Lily Pad A to Lily Pad B. He jumps 3 hops east. What are the coordinates of Lily Pad B?


A. $(3,7)$ are the coordinates for Lily Pad B.
B. $(6,4)$ are the coordinates for Lily Pad B.
C. $(9,7)$ are the coordinates for Lily Pad B.
D. $(6,10)$ are the coordinates for Lily Pad B.

| Master ID: | 3037634 Revision: | 2 |
| :--- | :---: | ---: |
| Correct: | C |  |
| Rubric: | 1 Point(s) |  |
| Standards: <br> MGSE5.G.2 |  |  |

8 MGSE5.G. 2 (DOK 2)
A dog walks away from his food bowl to his sleeping mat. He has to go five steps West to reach his mat. What are the coordinates to his sleeping mat?


A. $(4,10)$
B. $(10,4)$
C. $(5,4)$
D. $(4,5)$

| Master ID: | 3037628 Revision: | 2 |
| :--- | :---: | :---: |
| Correct: | C |  |
| Rubric: | 1 Point(s) |  |
| Standards: <br> MGSE5.G.2 |  |  |

Directions: Answer the following question(s).

9 MGSE5.G. 2 (DOK 2)
Justin is giving directions to Vernon. He is telling Vernon how to get from the Mall to the Candy Shop on the graph below. He needs some help from you because Vernon doesn't understand how to get to the Candy Shop. What directions should Justin provide Vernon so that Vernon arrives at the Candy Shop from the Mall?


| Master ID: $\quad 3037639$ Revision: |  |
| :--- | :---: |
| Rubric: $\quad 2$ Point(s) | 4 |
| MGSE5.G.2: Represent real-world and mathematical problems |  |
| by graphing points in the first quadrant of the coordinate plane, |  |
| and interpret coordinate values of points in the context of the |  |
| situation. |  |

2 Point Response:
The student correctly states accurate directions from the Mall to the Candy Shop.

Explanation:
The student's response must include these directions, though additional information may be provided.
Vernon needs to walk 5 blocks north (upwards along the y -axis), and then 2 blocks east/to the right along the $x$-axis.

The student may state that Vernon needs to walk 2 blocks east/to the right along the x -axis, and then travel 5 blocks north (upwards along the $y$-axis).

1 Point Response:
The student partially states directions from the Mall to the Candy Shop. The student may state that Vernon needs to walk 5 blocks north (upwards along the y-axis), OR that Vernon needs to travel 2 blocks east/to the right along the $x$-axis.

0 0 Point Response:
The student incorrectly states directions from the Mall to the Candy Shop.

## Standards:

MGSE5.G. 2

Directions: Answer the following question(s).

10 MGSE5.G. 2 (DOK 2)
The grid below indicates the location of several important places in Jeff's community.
a.) Plot the point $(5,3)$ on the coordinate grid, to represent the fountain located in the center of the community. Which landmark is farthest from the fountain?
b.) Jeff's house is located at the origin. Jeff wants to go to the movie theater, which is not designated on the grid. If the movie theater is twice as far on both the $x$ and $y$-axes as the school ( 2,2 ), what are the coordinates of the movie theater?


| Master ID: $\quad$ 3037630 Revision: |
| :--- | :---: |
| Rubric: $\quad 2$ Point(s) |
| MGSE5.G.2: Represent real-world and mathematical problems |
| by graphing points in the first quadrant of the coordinate plane, |
| and interpret coordinate values of points in the context of the |
| situation. |

2 2 Point Response:
The student correctly and completely answers Parts A \& B.
a.) Review the student's accuracy of placing the fountain at $(5,3)$ on the graph. The landmark furthest from the fountain is the school.
b.) The movie theater is at point $(4,4)$. The school is at $(2,2)$, and the movie theater is twice as far on the $x$-axis (4) and the $y$-axis (4).

1 Point Response:
The student correctly and completely answers Part A OR Part B.
$0 \quad 0$ Point Response:
The student incorrectly answers Parts A \& B.
Standards:
MGSE5.G. 2

11 MGSE5.OA. 3 (DOK 2)
What are the next two ordered pairs in the T-chart if the rule is multiply X by 3 ?

| $\mathbf{X}$ | $\mathbf{Y}$ |
| :---: | :---: |
| 0 | 0 |
| 1 | 3 |
| 2 | 6 |
| 3 | 9 |
| 4 | 12 |
| - | - |
| - | - |

A. $(5,15) ;(6,18)$
B. $(15,5) ;(18,6)$
C. $(5,18)$; $(6,21)$
D. $(18,5) ;(21,6)$

| Master ID: | 3037636 Revision: | 3 |
| :--- | :---: | :---: |
| Correct: | A |  |
| Rubric: | 1 Point(s) |  |
| Standards:    <br> MGSE5.OA.3    l |  |  |

12 MGSE5.OA. 3 (DOK 2)
Jason makes $\$ 3.00$ per day if he does his chores and homework. Which T-chart shows how much money he would earn in a week?
A.

| Day | $\mathbf{\$}$ |
| :---: | :---: |
| 1 | 3 |
| 2 | 9 |
| 3 | 27 |
| 4 | 81 |
| 5 | 243 |

B.

| Day | $\mathbf{\$}$ |
| :---: | :---: |
| 1 | 3 |
| 2 | 6 |
| 3 | 12 |
| 4 | 24 |
| 5 | 48 |

C.

| Day | $\$$ |
| :---: | :---: |
| 1 | 3 |
| 2 | 6 |
| 3 | 9 |
| 4 | 12 |
| 5 | 15 |

D.

| Day | $\$$ |
| :---: | :---: |
| 1 | 3 |
| 2 | 3 |
| 3 | 3 |
| 4 | 3 |
| 5 | 3 |


| Master ID: | 3037629 Revision: | 2 |
| :--- | :---: | ---: |
| Correct: | C |  |
| Rubric: | 1 Point(s) |  |
| Standards:    <br> MGSE5.OA.3    $\mathbf{l}$ |  |  |

Directions: Answer the following question(s).

13 MGSE5.OA. 3 (DOK 2)
Given the rule (multiply by 2 ) and the starting number 2 , and given the rule (multiply by 3 ) and the starting number 4, generate the resulting terms and state the ordered pair.
A. $(4,12)$
B. $(6,8)$
C. $(4,7)$
D. $(4,4)$

| Master ID: | 3037631 Revision: | 2 |
| :--- | :---: | ---: |
| Correct: | B |  |
| Rubric: | 1 Point(s) |  |
| Standards: |  |  |
| MGSE5.OA.3 |  |  |

14 MGSE5.OA. 3 (DOK 2)
Brenda's mom told her that children grow about 6 cm per year. Brenda would like to estimate how tall she might be at age 15. Currently, Brenda is 12 years old and 135 cm tall.

| age | height |
| :---: | :---: |
| 12 | 135 cm |
| 13 | 141 cm |
| 14 |  |
| 15 |  |

a.) Use the table above to determine how tall Brenda might be at age 15 .
b.) Will Brenda be at least 180 cm at age 20? Show your thinking.
c.) How tall will she be at age 20 ?

Directions: Answer the following question(s).

| Master ID: $\quad$ 3 Point(s) | 6 |
| :--- | :--- |
| Rubric: | 6 Revision: |
| MGSE5.OA.3: Generate two numerical patterns using a given |  |
| rule. Identify apparent relationships between corresponding |  |
| terms by completing a function table or input/output table. Using |  |
| the terms created, form and graph ordered pairs on a coordinate |  |
| plane. |  |

44 Point Response:
The student responds correctly and completely to parts $A, B$, and $C$, including showing how it is that Brenda will likely be at least 180 cm at age 20 .

## Correct Responses:

a.) Brenda is 135 cm at age 12. Growing 6 cm each year, she will be 153 cm in 3 years (add 6 cm , to year $13=141 \mathrm{~cm}, 6 \mathrm{~cm}$. to year $14=147 \mathrm{~cm}$, and 6 cm . at year $15=153 \mathrm{~cm}$.)
b.) Continuing the pattern from part A, yes, Brenda will be 183 cm . tall at age 20. Between age 12 and age 20 is 8 years. Growing 6 cm each year, $8 \times 6=48 \mathrm{~cm}$. 135 cm (age 12) $+48 \mathrm{~cm}=183 \mathrm{~cm}$.
c.) Brenda will be 183 cm at age 20 .

3 Point Response:
The student responds correctly and completely to parts $A \& B, B \& C, O R A \& C$, including showing how it is that Brenda will likely be at least 180 cm at age 20 (if part $B$ is answered).

2 Point Response:
The student responds correctly and completely to part $\mathrm{A}, \mathrm{B}, \underline{\mathrm{OR}} \mathrm{C}$, including showing how it is that Brenda will likely be at least 180 cm at age 20 (if part $B$ is answered).

1 Point Response:
The student provides a somewhat correct answer to part A, B, OR C, but does not explain how it is that Brenda will likely be at least 180 cm at age 20 (if part B is answered).
$0 \quad 0$ Point Response:
The student responds incorrectly to parts A, B, and C, including an incorrect explanation for how it is that Brenda will likely be at least 180 cm at age 20.
Standards:
MGSE5.OA. 3

## MGSE5.OA. 3 (DOK 3)

CJ is saving for basketball camp that costs $\$ 143$. He decided that he will save his lawn mowing money in order to save the $\$ 143$.
a.) Create a T-chart that shows how much money CJ saves in the first 5 days, if he saves $\$ 8$ each day.
b.) If he saves $\$ 8$ each day for 17 days, will CJ have enough money to attend the basketball camp? Justify your answer.

## Directions: Answer the following question(s).

| Master ID: | 3037633 Revision: | 3 |
| :--- | :--- | :--- |
| Rubric: | 4 Point(s) |  |

MGSE5.OA.3: Generate two numerical patterns using a given rule. Identify apparent relationships between corresponding terms by completing a function table or input/output table. Using the terms created, form and graph ordered pairs on a coordinate plane.

4 Point Response:
The student responds correctly and completely to parts A \& B, including providing a correct and complete explanation for why CJ won't have enough money to attend the basketball camp if he saves $\$ 8$ each day for 17 days.

## Correct Responses:

a.) If CJ saves $\$ 8$ each day for 5 days, he now has $\$ 40$.

| Day | $\mathbf{\$}$ |
| :---: | :---: |
| 1 | 8 |
| 2 | 16 |
| 3 | 24 |
| 4 | 32 |
| 5 | 40 |

b.) If CJ saves $\$ 8$ each day for 17 days, he will only have $\$ 136$, which is not enough money for him to attend basketball camp. The basketball camp is $\$ 143$. He needs an additional $\$ 7$ to go.

3 Point Response:
The student responds correctly and completely to part A, and in part B, the student states that CJ won't have enough money to attend the basketball camp if he saves $\$ 8$ each day for 17 days.

2 Point Response:
The student responds correctly and completely to part A OR part B, including providing a correct and complete explanation for why CJ won't have enough money to attend the basketball camp if he saves $\$ 8$ each day for 17 days (if part $B$ is answered).

1 Point Response:
The student responds correctly to part A OR part B, with a few T-chart errors (part A) or incorrectly explaining why CJ won't have enough money to attend the basketball camp if he saves $\$ 8$ each day for 17 days.

## $0 \quad 0$ Point Response:

The student responds incorrectly to parts A \& B, and the student provides an incorrect and incomplete explanation for why CJ won't have enough money to attend the basketball camp if he saves $\$ 8$ each day for 17 days.
Standards:
MGSE5.OA. 3

