

# MATHEMATICS Grade 6 

## 2015 Released Test Questions

## TEST ADMINISTRATOR INSTRUCTIONS

## Question 1

| Grade | 6 | Subject | Mathematics |
| :--- | :--- | :--- | :--- |
| Reporting Category 1 | Numestion <br> demonstrate an understanding of how to represent and manipulate <br> dumbers and expressions. |  |  |
| Knowledge and Skill <br> Statement 6.4 | The student applies mathematical process standards to develop an <br> understanding of proportional relationships in problem situations. |  |  |
| Essence Statement | Identifies proportional relationships in a variety of forms. |  |  |
| Prerequisite Skill (OId <br> Curriculum) | use patterns to skip count by twos, fives, and tens (1) |  |  |

## Question 2

| Grade | 6 | Subject | Mathematics |
| :--- | :--- | :--- | :--- |
| Reporting Category 1 | Question <br> demerical Representations and Relationships: The student will <br> demonstrate an understanding of how to represent and manipulate <br> numbers and expressions. |  |  |
| Knowledge and Skill <br> Statement 6.4 | The student applies mathematical process standards to develop an <br> understanding of proportional relationships in problem situations. |  |  |
| Essence Statement | Identifies proportional relationships in a variety of forms. |  |  |
| Prerequisite Skill (Old <br> Curriculum) | find patterns in numbers such as in a 100s chart (2) |  |  |

## Question 3

| Grade | 6 | Subject | Mathematics |
| :--- | :--- | :--- | :--- |
| Reporting Category 1 | Question <br> Numerical Representations and Relationships: The student will <br> demonstrate an understanding of how to represent and manipulate <br> numbers and expressions. |  |  |
| Knowledge and Skill <br> Statement 6.4 | The student applies mathematical process standards to develop an <br> understanding of proportional relationships in problem situations. |  |  |
| Essence Statement | Identifies proportional relationships in a variety of forms. |  |  |
| Prerequisite Skill (OId <br> Curriculum) | find patterns in numbers such as in a 100s chart (2) |  |  |

## Question 4

| Grade | 6 | Subject | Mathematics | Question |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Reporting Category 1 |  | Numerical Representations and Relationships: The student will demonstrate an understanding of how to represent and manipulate numbers and expressions. |  |  |  |
| Knowledge and Skill Statement 6.4 |  | The student applies mathematical process standards to develop an understanding of proportional relationships in problem situations. |  |  |  |
| Essence Statement |  | Identifies proportional relationships in a variety of forms. |  |  |  |
| Prerequisite Skill (Old Curriculum) |  | identify and extend whole-number and geometric patterns to make predictions and solve problems (3) |  |  |  |

## Presentation Instructions for Question 1

- Present Stimulus 1.
- Direct the student to the dimes. Communicate: These dimes equal $\mathbf{2 0}$ cents. Ten cents. Twenty cents.
- Direct the student to the nickels. Communicate: These nickels also equal 20 cents. Five cents. Ten cents. Fifteen cents. Twenty cents.
- Communicate: Find the nickels that equal 20 cents.


## Stimulus 1



## Scoring Instructions

| Student Action |  | Test Administrator Action |
| :---: | :---: | :---: |
| If the student finds the nickels that equal 20 cents, | $\square$ | mark $\mathbf{A}$ for question 1 and move to question 2. |
| If the student does not find the nickels that equal 20 cents, | $\square$ | - remove the stimulus; <br> - wait at least five seconds; and <br> - replicate the initial presentation instructions. |
| After the five-second wait time, if the student finds the nickels that equal 20 cents, | $\cdots$ | mark $\mathbf{B}$ for question 1 and move to question 2. |
| After the five-second wait time, if the student does not find the nickels that equal 20 cents, | $\square$ | mark $\mathbf{C}$ for question 1 and move to question 2. |

## Presentation Instructions for Question 2

- Present Stimulus 2a and 2b.
- Direct the student to the nickels. Communicate: This group of nickels equals one dollar.
- Direct the student to each answer choice in Stimulus 2b without identifying the total value of each group. Communicate: Four dimes. Ten dimes.
- Communicate: Find the group of dimes that also equals one dollar.


## Stimulus 2a



Stimulus 2b


Scoring Instructions

| Student Action |  | $\begin{array}{c}\text { Test Administrator Action }\end{array}$ |
| :--- | :--- | :--- |
| If the student finds the group of 10 dimes, | $\boldsymbol{m}$ | $\begin{array}{l}\text { mark } \mathbf{A} \text { for question } 2 \text { and move to } \\ \text { question 3. }\end{array}$ |
| $\begin{array}{l}\text { If the student does not find the group of } \\ 10 \text { dimes, }\end{array}$ | $\boldsymbol{m o d e l}$ the desired student action by finding |  |
| the group of 10 dimes that equals one dollar |  |  |
| and communicate "This group of dimes |  |  |
| equals one dollar"; and |  |  |
| replicate the initial presentation instructions. |  |  |$\}$

## Presentation Instructions for Question 3

- Present Stimulus 3a and 3b.
- Direct the student to Stimulus 3a. Communicate: This is a numbers chart. The numbers in this chart follow a pattern.
- Direct the student to the circled numbers. Communicate: 13, 14, 15, 16 follow a pattern.
- Direct the student to each answer choice in Stimulus 3b. Communicate each answer choice.
- Communicate: Find the number sentences that show the pattern from one circled number to the next circled number.


## Stimulus 3a

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

Stimulus 3b

| $13+1=14$ |
| :---: |
| $14+1=15$ |
| $15+1=16$ |$\quad$| $3+10=13$ |
| :---: |
| $13+10=23$ |
| $23+10=33$ |$\quad$| $11+2=13$ |
| :--- |
| $13+2=15$ |
| $14+2=16$ |

## Scoring Instructions

| Student Action |  | Test Administrator Action |
| :---: | :---: | :---: |
| If the student finds the number sentences that show a "plus one" pattern, | $\square$ | mark $\mathbf{A}$ for question 3 and move to question 4. |
| If the student does not find the number sentences that show a "plus one" pattern, | $\square$ | provide one of these allowable teacher assists to the student: <br> - Have the student identify how much needs to be added to a circled number to get the next circled number. OR <br> - Count from 1 to 20 on the chart. <br> Replicate the initial presentation instructions. |
| After the selected teacher assistance, if the student finds the number sentences that show a "plus one" pattern, | $\square$ | mark $\mathbf{B}$ for question 3 and move to question 4. |
| After the selected teacher assistance, if the student does not find the number sentences that show a "plus one" pattern, | $\square$ | mark $\mathbf{C}$ for question 3 and move to question 4. |

## Presentation Instructions for Question 4

- Present Stimulus 4a and 4b.
- Direct the student to Stimulus 4a. Communicate: This is a numbers chart. The numbers in this chart follow a pattern.
- Direct the student to the bolded column in Stimulus 4a. Communicate: There are three missing numbers that belong in this column.
- Direct the student to each answer choice in Stimulus 4b.
- Communicate: Find the missing numbers that belong in the column.


## Stimulus 4a

| 46 | 47 | 48 | 49 |
| :--- | :--- | :--- | :--- |
| 56 | 57 | 58 | 59 |
| 66 | 67 | 68 | 69 |
| 76 | 77 | 78 |  |
| 86 |  |  |  |
|  |  |  |  |

## Stimulus 4b

| 80 |
| :---: |
| 90 |
| 100 |$\quad$| 79 |
| :--- |
| 88 |
| 97 |$\quad *$| 79 |
| :---: |
| 89 |
| 99 |

Scoring Instructions

| Student Action |  | Test Administrator Action |
| :--- | :--- | :--- |
| If the student finds the column with 79, 89, <br> and 99, | $\Rightarrow$ | mark $\mathbf{A}$ for question 4. |
| If the student does not find the column with <br> 79,89 , and 99, | $\boldsymbol{m}$ | replicate the initial presentation instructions. |
| After the teacher repeats the instructions, if <br> the student finds the column with 79, 89, and <br> 99, | $\Rightarrow$ | mark $\mathbf{B}$ for question 4. |
| After the teacher repeats the instructions, if <br> the student does not find the column with 79, <br> 89, and 99, | $\Rightarrow$ | mark $\mathbf{C}$ for question 4. |

