



MAP Growth, MAP Growth K-2

# RIT Reference Charts



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**225**



## Understanding RIT Scores and the Reference Charts

MAP Growth tests produce scores that make it possible to monitor student growth from year to year along developmental scales. The charts that follow show examples of the kinds of work students do at various points along the MAP Growth RIT scale, assuming they have been exposed to content.

**200**



**190**

- For any MAP Growth score, students will answer questions at or near that score correctly about half the time.
- Questions with lower RIT will be answered correctly more frequently.
- Questions of higher RIT will be answered correctly less frequently. More difficult questions will probably require new learning on the part of the student.

### PLEASE NOTE

Each subject area has a unique alignment to the RIT scale. As a result, scores between subjects are not equivalent.

**150**



Test items in this booklet are sample items, and many have not been calibrated or field tested. For purposes of this document, RIT scale alignment is an approximation.

## Computation and Problem Solving

Students understand whole number operations. They represent and solve word problems.

## PLEASE NOTE

MAP Growth K-2 items have audio and sometimes little or no text on the screen.

The example items present the visual of the item and we include text in the examples to show what the student hears when the text is absent from the screen.

## 141–150

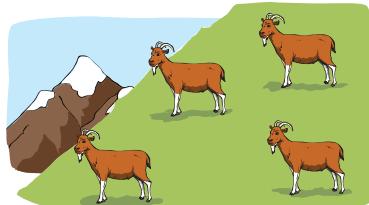


**Listen to the word problem.**

There are four goats on the hillside. Three goats leave the hillside.

**Putting an X on a goat means it has left the hillside.**

**Move Xs to the goats to show how many have left the hillside.**

**X**

## 171–180



**Listen to the word problem.**

Lauren lost 1 baseball cap. Now she has only 2 baseball caps. How many baseball caps did Lauren have before she lost one?

**Move numbers to the boxes to show the problem.**

$$\boxed{\quad} - \boxed{\quad} = 2$$

1 2 3 4 5

## below 131



**Look at the trucks.**

**Two trucks and one more truck is how many trucks altogether?**



1 2 3 4 5

## 131–140



**Listen to the story problem.**

There is one tree in the yard. Two more get planted in the yard.

**Move the trees to the yard to show how many there are altogether.**



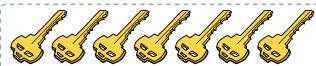
## 151–160



**Look at the problem.**

**What is the answer?**

**You can use the keys to help you find the answer.**



$$7 - 4 = \underline{\quad}$$

0 1 2 3 4 5 6 7 8 9

## 161–170



**What is the answer?**

$$7 + 8 = \underline{\quad}$$

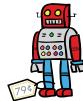
14 15 16 17 18

## 181–190



**Listen to the story.**

Julia bought a robot toy for 79 cents. She paid for it with one dollar.



**Show the change that Julia should receive.**



## above 190



**Look at the problem.**

**What is the answer?**

$$\begin{array}{r} 2 \\ \times 7 \\ \hline \end{array}$$

0 1 2 3 4 5 6 7 8 9

**Number Sense**

Students understand counting, cardinality, and ordinal numbers. They know whole number and fraction concepts, including place value and comparisons.

**PLEASE NOTE**

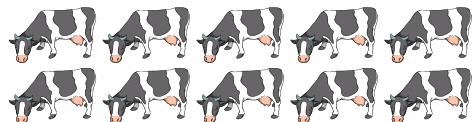
MAP Growth K-2 items have audio and sometimes little or no text on the screen.

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**141–150**

**Look at the pictures.**

**Choose 9 cows.**

**171–180**

**Look at the number.**

**What is 100 more than 347?**

347

0 1 2 3 4 5 6 7 8 9

**below 131**

**Look at the picture.**

**How many superheroes are there?**



- (1)    (2)    (3)    (4)

**151–160**

**Look at the numbers.**

**Which number is 1 more than 13?**

- (4)    (14)    (15)    (17)    (20)

**181–190**

**Look at the numbers.**

**Put the correct symbol in each of the problems to make them true.**

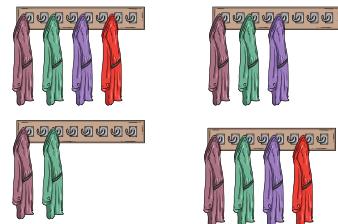
532        591    358        358    823        453

<      >      =

**131–140**

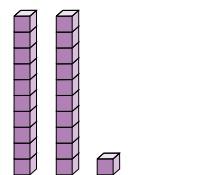
**Look at the coatracks.**

**Choose the rack that has the fewest coats.**

**161–170**

**Look at the picture.**

**What number do the blocks show?**



1    21    20    201

**above 190**

**Listen to the words that describe a number:  
6 hundreds and 5 ones.**

**Write the number that is described.**

6 hundreds and 5 ones

0 1 2 3 4 5 6 7 8 9

# MATHEMATICS K–2 | MEASUREMENT AND GEOMETRY

## Measurement and Geometry

Students understand measurement and money. They problem solve using units. They recognize shapes and attributes, as well as use spatial reasoning.

### PLEASE NOTE

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The example items present the visual of the item and we include text in the examples to show what the student hears when the text is absent from the screen.

## below 131



**Look at the picture.**

**Which student is the shortest?**

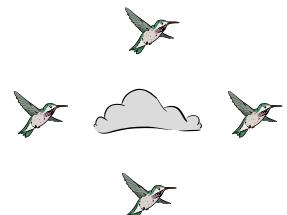


## 131–140



**Look at the picture.**

**Which bird is over the cloud?**



## 141–150

## 151–160



(Audio only; text not on screen.)

**Look at the calendar.**

**Choose the day on the calendar that shows October 14.**

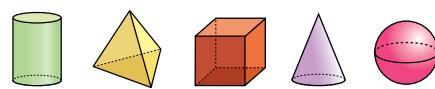


## 161–170



**Look at the objects.**

**Choose the pyramid.**



## 171–180

## 181–190



**Look at the objects.**

**Choose ALL the objects that have six faces.**

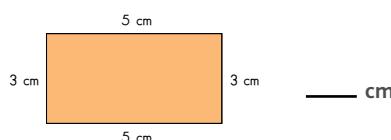


## above 190



**Look at the rectangle.**

**What is the perimeter of the rectangle?**



3:45             8:20    4:40

10	11	12	13	14	
15	16	17	18	19	20

**Statistics and Probability**

Students collect, organize, display, and analyze data. They understand probability and apply it to make predictions.

**PLEASE NOTE**

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**141–150**

**Look at the sticker chart.**

**Which student has the most star stickers?**

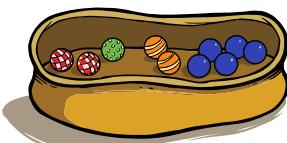
Gold Star Stickers	
Sarah	★★★
Pablo	★
Jamal	★★★★★
Cher	★★★
Maria	★★★★

**171–180**

**Look at the picture.**

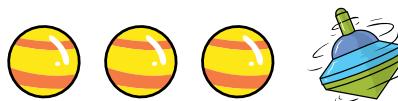
Saba closes her eyes and pulls one gum ball out of the bag.

**Which gum ball is Saba least likely to pull from the bag?**

**below 131**

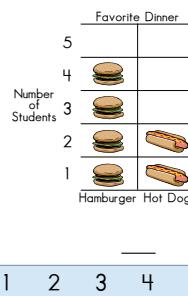
**Look at the pictures.**

**Choose the picture that is different from the others.**

**151–160**

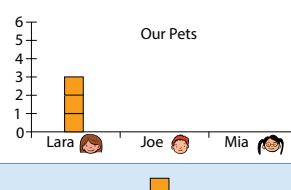
**Look at the graph.**

**How many students chose hot dog as their favorite dinner?**

**181–190**

**Look at the graph that is not complete.**

Lara has 3 cats, Joe has 5 fish, and Mia has 2 dogs.  
Move squares to complete the graph.

**131–140**

**Look at the group of objects. The objects in the group belong together.**

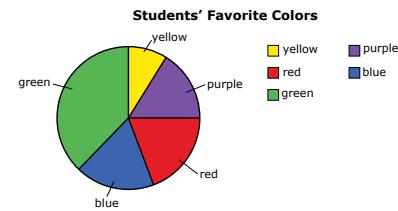


**Which object belongs with the group?**

**161–170**

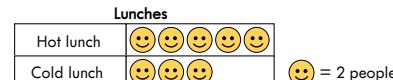
**Look at the circle graph that shows the students' favorite colors.**

**Which color did the most students choose?**

**above 190**

**Look at the graph.**

Students were asked if they had hot lunch or cold lunch. How many students were asked in all?



2    8    9    16    18

**Algebra**

Students recognize and analyze patterns. They understand algebraic concepts and relationships.

**PLEASE NOTE**

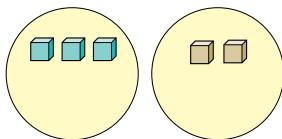
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**141–150**

**Look at the two groups.**

**Move cubes to the circles to make the groups equal.**

**171–180**

**Look at the problem.**

**Move the correct number to the blank to make the sentence true.**

**You can use the number line and arrows to help you find the answer.**



$$3 = \underline{\quad} - 4$$

1 2 3 4 5 6 7 8 9 ↵

**below 131**

**Look at the pattern.**

**Which animal comes next in the pattern?**

**151–160**

**Look at the number sentence that is missing a symbol.**

$$2 + 5 \underline{\quad} 7$$

**Which symbol belongs between the 5 and the 7 to make the sentence true?**

-      +      =      ×

**181–190**

**Listen to the word problem.**

The Lions had 47 points at halftime.  
At the end of the game they had 89 points.

**How many points did the Lions score after halftime?**

\_\_\_\_\_ points

0 1 2 3 4 5 6 7 8 9

**131–140**

**Look at the pattern.**

**Move the beans to the boxes to continue the pattern.**

**161–170**

**Look at the problem.**

**Move the correct number to the blank line to make the sentence true.**

**You can use the buttons to help you find the answer to the problem.**

$$4 + \underline{\quad} = 6$$

0 1 2 3 4 5 6 7 8 9 ↵

**above 190**

**Which problem is true?**

$$423 \times 0 = 0$$

$$423 \times 0 = 1$$

$$423 \times 0 = 423$$

$$423 \times 0 = 4230$$



225



## Understanding RIT Scores and the Reference Charts

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200



### Question Difficulty and the RIT Scale

These charts demonstrate the relationship between question difficulty and our RIT scale:

- For any MAP Growth score, students will answer questions at or near that score correctly about half the time.
- Questions with lower RIT will be answered correctly more frequently.
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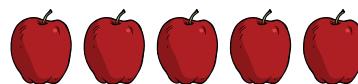
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## below 161

## Number Sense

Students understand and apply concepts of numbers including representing, identifying, counting, comparing, ordering, equivalence, and number theory.

Use the picture to answer the question.

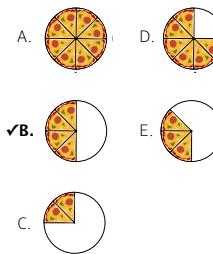


How many apples are there?

- A. 4
- B. 5
- C. 6
- D. 7

## 161–170

Which picture shows  $\frac{1}{2}$  of a pizza?



## 171–180

## Which expression is true?

- A.  $6 + 8 = 68$
- B.  $6 + 80 = 68$
- C.  $60 + 8 = 68$
- D.  $60 + 80 = 68$

## 181–190

What is 68 rounded to the nearest tens place?

- A. 60
- B. 65
- C. 70
- D. 100

## 191–200

Move numbers to the lines to order them from least to greatest.

least \_\_\_\_\_ greatest

92,601      9,849      276,953      28,637

## 201–210

## Which number goes in the box?

$$\frac{8}{18} = \frac{\square}{9}$$

- A. 2
- B. 4
- C. 9
- D. 10

## 211–220

Which set contains all the factors of 20?

- A. {2, 4, 5, 10}
- B. {5, 10, 15, 20}
- C. {1, 2, 4, 5, 8, 15}
- D. {1, 2, 4, 5, 10, 20}

## 221–230

What is the greatest common factor of 54 and 72?

- A. 6
- B. 9
- C. 18
- D. 27

## 231–240

There are 20 students in a music class. Twelve of the students are boys.

What is the ratio of girls to boys in the music class?

- A. 2:5
- B. 3:5
- C. 2:3
- D. 3:2

## 241–250

Move the numbers to the boxes to order them from least to greatest value.

least , , , ,  greatest

12  $\frac{1}{3}$       18.5       $\sqrt{51}$       51.2       $\sqrt{225}$

## above 250

The length of a certain moon's orbit is approximately  $1.5 \times 10^{11}$  meters. The diameter of a certain star is approximately  $1.5 \times 10^9$  meters.

How many times greater is the distance of the moon's orbit compared to the diameter of the star? Enter the answer in the box.

times greater

## below 161

## Computation and Problem Solving

Students understand and apply the process of computation to accurately compute and solve real-world and mathematical problems involving whole numbers, fractions, decimals, integers, and rational and real numbers.

Solve:

$$6 + 2 = \boxed{\quad}$$

- A. 4  
B. 7  
**✓C. 8**  
D. 9

## 161–170

Some boxes of candy are shown.



Which number sentence shows how to find the total candies in the boxes?

- A.  $4 + 3 = \boxed{\quad}$   
B.  $3 + 4 = \boxed{\quad}$   
**✓C.  $4 + 4 + 4 = \boxed{\quad}$**   
D.  $3 + 3 + 3 = \boxed{\quad}$

## 171–180

Find the difference.

$$\begin{array}{r} 99 \\ - 56 \\ \hline \end{array}$$

- A. 33  
B. 34  
**✓C. 43**  
D. 44

## 181–190

Use the picture to answer the question.



Sonja and Kai share the toys equally.  
How many toys will they each have?

- A. 1  
B. 2  
**✓C. 4**  
D. 8

## 191–200

Solve:

$$\frac{5}{7} - \frac{3}{7} =$$

$$\text{✓A. } \frac{2}{7}$$

- B.  $\frac{8}{7}$   
C. 2  
D. 7

## 201–210

Jorge wants to buy enough hot dog buns for 50 hot dogs. The buns come in packages of 8. He uses this number sentence to find the number of packages he will need.

$$50 \div 8 = 6 \text{ r}2$$

What is the LEAST number of packages needed?

- A. 6  
**✓B. 7**  
C. 8  
D. 9

## 211–220

A group of 28 people is going to a museum. The people will take cars. Each car can hold up to 5 people.

How many cars will they need?

- A. 4  
B. 5  
**✓C. 6**  
D. 7

## 221–230

Simplify:

$$-\frac{5}{8} + \left(-\frac{1}{4}\right)$$

- A.  $-\frac{1}{4}$   
B.  $-\frac{3}{8}$   
**✓C.  $-\frac{7}{8}$**   
D.  $-\frac{3}{2}$

## 231–240

Simone makes pies. She uses  $3\frac{1}{2}$  pounds of bananas to make 12 servings of banana pie.

How many pounds of bananas does Simone need to make 48 servings of banana pie?

- A. 4  
B. 6  
C. 10  
**✓D. 14**

## 241–250

Simplify:

$$\frac{(1.5 \times 10^{12}) (1.2 \times 10^{-15})}{(2.0 \times 10^{12})}$$

- ✓A.  $9.0 \times 10^{-16}$**   
B.  $9.0 \times 10^{-15}$   
C.  $9.0 \times 10^{15}$   
D.  $9.0 \times 10^{16}$

## above 250

Which is equivalent to  $2 + 3\sqrt{-12}$ ?

- A.  $8i\sqrt{3}$   
B.  $-i\sqrt{12}$   
C.  $-4i\sqrt{12}$   
**✓D.  $2 + 6i\sqrt{3}$**   
E.  $2 - 3i\sqrt{12}$

## below 161

## Algebraic Concepts

Students understand and apply algebraic concepts, including extending patterns, simplifying expressions, solving equations and inequalities, plotting points on the coordinate plane, and working with functions.

## 161–170

A pattern is shown.

2, 4, 6, 8, \_\_\_\_\_

What number comes next in the pattern?

- A. 8
- B. 9
- C. 10
- D. 12

Which number makes the number sentence true?

$$\square + 7 = 13$$

- A. 3
- B. 6
- C. 14
- D. 20

## 171–180

Nia is making a necklace of beads in a pattern of 2 plain beads, 3 striped beads, and 1 bead with a star.

Which picture shows Nia's beads?

- A.
- B.
- C.
- D.

## 181–190

Which number makes the number sentence true?

$$52 - \square = 12$$

- A. 30
- B. 32
- C. 40
- D. 42
- E. 64

## 191–200

Saja wants to solve this problem.

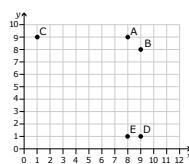
$$12 - 4 = \underline{\hspace{2cm}}$$

Which number sentence can Saja use to help solve the problem?

- A.  $\underline{\hspace{2cm}} - 4 = 12$
- B.  $\underline{\hspace{2cm}} + 4 = 12$
- C.  $4 + 12 = \underline{\hspace{2cm}}$
- D.  $4 - 12 = \underline{\hspace{2cm}}$

## 201–210

Use the graph to answer the question.

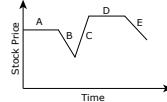


Which point is located at the coordinates (9, 8)?

- A. A
- B. B
- C. C
- D. D
- E. E

## 211–220

The graph shows the change in price of a stock over time.



Identify the time intervals for which the stock price increased, decreased, or remained constant.

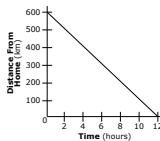
Move the intervals to the appropriate column in the table.

Stock Price Increased	Stock Price Decreased	Stock Price Remained Constant

A      B      C      D      E

## 231–240

The graph shows the 600-kilometer (km) flight home of a pigeon.



What is the pigeon's average speed for the trip?

- A. 600 km per hour
- B. 60 km per hour
- C. 100 km per hour
- D. 50 km per hour

## 241–250

Use the system of equations to answer the question.

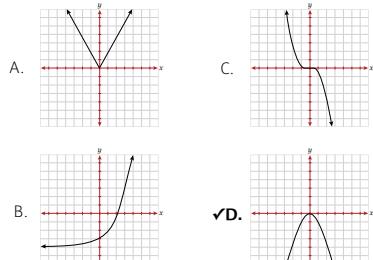
$$\begin{aligned} 2x + 2y &= 6 \\ y &= x - 5 \end{aligned}$$

What is the solution to the system of equations?

- A. (1, 2)
- B. (1, -4)
- C. (2, 1)
- D. (4, -1)

## above 250

Which graph shows a quadratic relationship between  $x$  and  $y$ ?

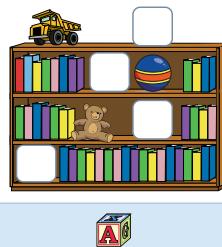


## below 161

## Geometry

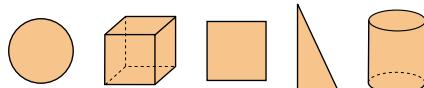
Students understand and apply geometry concepts, including identification and classification of two- and three-dimensional figures, symmetry and transformations, similar and congruent figures, the Pythagorean Theorem, and scale factors.

**Move the block next to the ball.**



## 171–180

**Choose all the shapes that are flat.**



**Use the set of shapes to complete the task.**

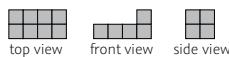


**Choose all the terms that describe the set of shapes.**

- A. squares
- B. rectangles
- C. trapezoids
- D. parallelograms
- E. quadrilaterals

## 201–210

The diagram shows the top, front, and side views of a solid.

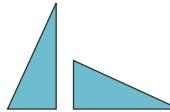


**Which solid could this be?**

- A.
- B.
- C.
- D.
- E.

## 211–220

**Use the figures to answer the question.**



**What type of transformation is shown?**

- A. translation
- B. rotation
- C. reflection
- D. dilation
- E. congruent

## 231–240

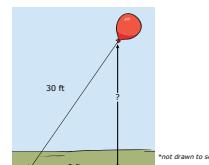
Students at a middle school built a model of their school. The school is 700 ft long and 500 ft wide.

If the students used a scale of 10 ft = 1 in., what are the dimensions of the model?

- A. 70 ft by 50 ft
- B. 70 ft by 50 in.
- C. 7 ft by 50 ft
- D. 70 in. by 50 in.
- E. 7 in. by 5 in.

A balloon is attached to a 30-foot string secured to the ground.

**How far above the ground is the balloon?**



- A. 21 ft
- B. 39 ft
- C.  $\sqrt{819}$  ft
- D.  $\sqrt{981}$  ft

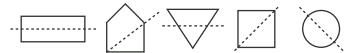
## 161–170

**Which shape is a triangle?**

- A.
- D.
- B.
- E.
- C.

## 191–200

**Some figures are shown.**



**Choose all the figures that show a line of symmetry.**

## 221–230

**Which net can be folded along the dotted lines to make a closed cube?**

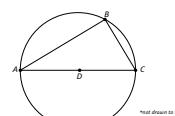
- A.
- B.
- C.
- D.
- E.

## above 250

Circle  $D$  is shown with a diameter  $\overline{AC}$ .

If  $m\angle ACB = 54^\circ$ , what is  $m\angle BAC$ ?

Circle  $D$  is shown with a diameter  $\overline{AC}$ .  
\*not drawn to scale



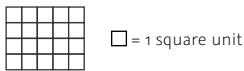
- A.  $27^\circ$
- B.  $36^\circ$
- C.  $54^\circ$
- D.  $63^\circ$

**Measurement**

Students understand and apply concepts of measurement, including measuring; conversion; using appropriate units; and calculating perimeter, circumference, area, and surface area.

**171–180**

Use the figure to answer the question.

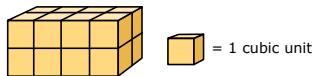


What is the area of the figure?

- A. 5 square units
- B. 9 square units
- C. 18 square units
- ✓D.** 20 square units

**201–210**

The picture shows a figure made of stacked cubes.

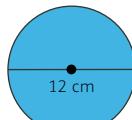


What is the volume of the figure?

- A. 8 cubic units
- B. 10 cubic units
- C. 12 cubic units
- ✓D.** 16 cubic units

**231–240**

The area,  $A$ , of the circle can be found using the formula  $A = \pi r^2$ , where  $r$  is the radius.



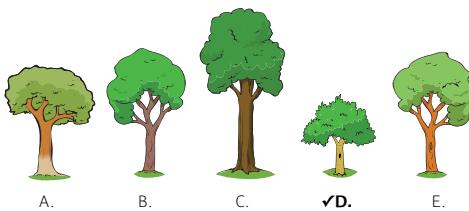
What is the approximate area of the circle? Use 3.14 for  $\pi$ .

- A. 18.8  $\text{cm}^2$
- B. 37.7  $\text{cm}^2$
- ✓C.** 113.0  $\text{cm}^2$
- D. 452.2  $\text{cm}^2$

**below 161**

Use the picture to answer the question.

Which tree is the shortest?



161–170 Use the picture to answer the question.



How long is the pencil?

- A. 4 cm
- B. 5 cm
- C. 6 cm
- ✓D.** 7 cm
- E. 8 cm

**181–190**

Dante has 3 dimes, 2 nickels, and 4 pennies.

How much money does Dante have?

- A. 9¢
- ✓B.** 44¢
- C. 54¢
- D. 60¢

191–200 Use the rectangle to answer the question.

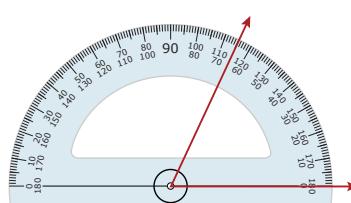


What is the perimeter?

- A. 8 inches
- B. 12 inches
- C. 20 inches
- ✓D.** 24 inches

**211–220**

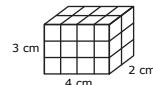
Use the picture to answer the question



What is the measurement of the angle shown?

- ✓A.** 65°
- B. 75°
- C. 115°
- D. 125°

221–230 Use the figure to answer the question.



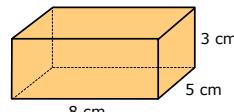
Choose all the expressions that can be used to find the volume of the rectangular prism.



12 + 12    12 + 12 + 8    8 + 8 + 8    8 + 8 + 8 + 8

**241–250**

Use the diagram to answer the question.



What is the surface area of this rectangular solid?

- A. 79  $\text{cm}^2$
- B. 110  $\text{cm}^2$
- C. 120  $\text{cm}^2$
- D. 128  $\text{cm}^2$
- ✓E.** 158  $\text{cm}^2$

above 250 The diameter of sphere A is twice the diameter of sphere B.

**above 250**

What is the ratio of the volume of sphere A to the volume of sphere B?

- ✓A.** 8:1
- B. 1:8
- C. 2:1
- D. 1:2
- E. 1:1

**Data, Statistics, and Probability**

Students understand and apply concepts of organizing, reading, and interpreting graphs, collecting and analyzing data, and determining probability and using it to predict outcomes.

**171–180**

Third graders voted for their new school mascot. The tally chart shows the results.

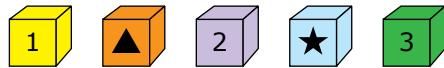
School Mascot Votes	
Tigers	
Wildcats	
Bears	
Eagles	

How many votes did Wildcats get?

- A. 15      C. 20  
**✓B. 16**      D. 22

**201–210**

Ivan places these five blocks into a bag.



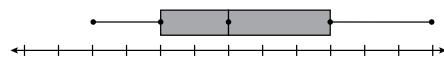
Ivan picks one block without looking.

What is the probability that the block Ivan picks has a number on it?

- |                  |                  |                  |                                     |
|------------------|------------------|------------------|-------------------------------------|
| A. $\frac{1}{5}$ | B. $\frac{1}{3}$ | C. $\frac{2}{5}$ | <b>✓D. <math>\frac{3}{5}</math></b> |
|------------------|------------------|------------------|-------------------------------------|

**231–240**

Use the box plot to answer the question.



What is the median of the data?

- A. 20      D. 35  
**✓B. 30**      E. 45  
 C. 32.5

**211–220**

This list shows the number of points Julia scored in each of her last seven basketball games.

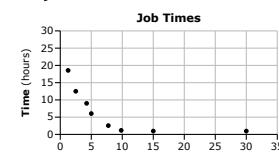
10, 14, 16, 12, 14, 14, 11

What is the mean number of points Julia scored?

- A. 10  
**✓B. 13**  
 C. 14  
 D. 16

**241–250**

The scatter plot shows data about the number of people who are working on a job and the amount of time needed to complete the job.

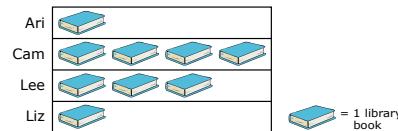


What type of relationship is shown between the number of people and time?

- A. positive and linear      C. positive and nonlinear  
 B. negative and linear      **✓D. negative and nonlinear**

**below 161**

Use the graph to answer the question.

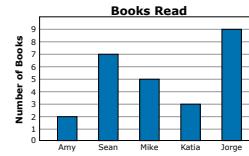


Who has the most library books?

- A. Ari  
**✓B. Cam**  
 C. Lee  
 D. Liz

**161–170**

Use the graph to answer the question.

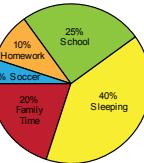


Who read the most books?

- A. Amy  
 B. Sean  
 C. Mike  
 D. Katia  
**✓E. Jorge**

**191–200**

The circle graph shows how Ana spends her day.



What percent of Ana's day is spent on family time and soccer?

- A. 5%      D. 35%  
 B. 20%      E. 40%  
**✓C. 25%**

**221–230**

Anita rolled a number cube with sides numbered 1–6. The first eight results are listed.

3, 2, 6, 4, 5, 1, 4, 2

Anita rolled the number cube two more times. The mean of all 10 rolls is 3.

What were the results of Anita's last two rolls? Move numbers to the blanks to complete the sentence.

Anita's last two rolls must have been \_\_\_ and \_\_\_.

1      2      3      4      5      6

**above 250**

A bag contains 2 green blocks, 3 red blocks, and 5 blue blocks. Two blocks are randomly chosen without replacement.

What is the probability that the first block is green and the second block is red?

- A.  $\frac{1}{15}$       C.  $\frac{1}{6}$   
 B.  $\frac{1}{10}$       D.  $\frac{3}{10}$



**225**



## Understanding RIT Scores and the Reference Charts

MAP Growth tests produce scores that make it possible to monitor student growth from year to year along developmental scales. The charts that follow show examples of the kinds of work students do at various points along the MAP Growth RIT scale, assuming they have been exposed to content.

**200**



**190**

### Question Difficulty and the RIT Scale

These charts demonstrate the relationship between question difficulty and our RIT scale:

- For any MAP Growth score, students will answer questions at or near that score correctly about half the time.
- Questions with lower RIT will be answered correctly more frequently.
- Questions of higher RIT will be answered correctly less frequently. More difficult questions will probably require new learning on the part of the student.

### PLEASE NOTE

Each subject area has a unique alignment to the RIT scale. As a result, scores between subjects are not equivalent.

**150**



Test items in this booklet are sample items, and many have not been calibrated or field tested. For purposes of this document, RIT scale alignment is an approximation.

# READING K–2 | PHONOLOGICAL AWARENESS

## Phonological Awareness

Students identify, blend, isolate, and manipulate phonemes. They recognize rhyme and count syllables in words.

### PLEASE NOTE

MAP Growth K–2 items have audio and sometimes little or no text on the screen.

The example items present the visual of the item and we include text in the examples to show what the student hears when the text is absent from the screen.

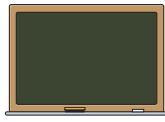
## 141–150



(Audio only; text not on screen.)

**Listen to the syllables: /chick/ /en/. Blend the syllables together to make a word.**

**Which word says /chick/ /en/ blended together?**



(Audio plays names of pictures when selected: chalkboard, cat, chicken, woman.)

## 171–180



(Audio only; text not on screen.)

**Listen to the word: clap. Take the /L/ sound away.**

**Which picture shows this new word?**



(Audio plays names of pictures when selected: cup, cap, clip, clock.)

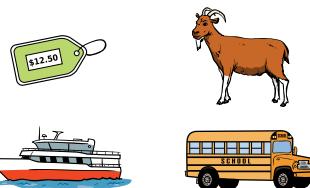
## below 131



(Audio only; text not on screen.)

**Listen to the names of the pictures: tag, goat, boat, bus.**

**Choose the pictures that rhyme.**



(Audio plays names of pictures when selected: tag, goat, boat, bus.)

## 131–140



(Audio only; text not on screen.)

**Listen to the beginning sound of each word: ring, rake, cone, rope.**

**Which word has a different beginning sound from the other words?**



(Audio plays names of pictures when selected: ring, rake, cone, rope.)

## 151–160



(Audio only; text not on screen.)

**Listen to the sounds and put them together: /j/ /am/.**

**Choose the picture that shows this word: /j/ /am/.**



(Audio plays names of pictures when selected: boat, ham, jam, frog.)

## 161–170



(Audio only; text not on screen.)

**Look at the pictures.**

**Which word has the long A sound as in the word “late”?**



(Audio plays names of pictures when selected: cat, cake, key, coat.)

## 181–190



(Audio only; text not on screen.)

**Listen to the word: mail. Take the /A/ sound away. Put the /E/ sound in its place.**

**Which picture is the new word?**



(Audio plays names of pictures when selected: lamp, meal, pail, mat.)

## above 190



(Audio only; the answer options are the only text on screen.)

**Listen to the word: butterfly.**

**How many syllables are in the word “butterfly”?**



1 2 3 4

# READING K–2 | PHONICS

## Phonics

Students know and apply letter-sound correspondences and regular decoding patterns. They use spelling patterns and syllabication rules to decode words. They recognize sight words.

### PLEASE NOTE

MAP Growth K–2 items have audio and sometimes little or no text on the screen.

The example items present the visual of the item and we include text in the examples to show what the student hears when the text is absent from the screen.

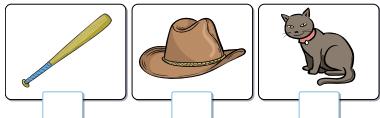
## 141–150



(Audio only; the answer options are the only text on screen.)

Look at the pictures: bat, hat, cat.

Match the letters to the beginning sound of each picture.



H    B    C

## 171–180



(Audio only; the answer options are the only text on screen.)

Listen to the word: coin.

Choose the word “coin.”



cuin    coin    coan    cown

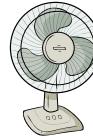
## below 131



(Audio only; the answer options are the only text on screen.)

Listen to the word: fan.

Which letter makes the sound /f/, as in “fan”?



Q    F    V    D    H

## 151–160



(Audio only; the answer options are the only text on screen.)

Listen to the word: top.

Which letter makes the ending sound in the word “top”?



m    g    s    p

## 131–140



(Audio only; the given letter N is the only text on screen.)

Look at the letter N.

Choose the picture that begins with the letter N.

Nn



(Audio plays names of pictures when selected: kite, dog, pie, net.)

## 161–170



(Audio only; the answer options are the only text on screen.)

Listen to the word: sandwich.

Which letters make the ending sound in the word “sandwich”?



ph    th    sh    ch

## 181–190



(Audio only; the answer options are the only text on screen.)

Listen to the sound: /O/.

Which pair of letters makes the /O/ sound?

eo    oa    oi    ou

(The target sound is a long O.)

## above 190



(Audio only; the answer options are the only text on screen.)

Listen to the word: surprise.

Move the slash to divide the word into its syllables.

surprise

/

# READING K–2 | CONCEPTS OF PRINT

## Concepts of Print

Students understand foundational concepts about words, text, and parts of books. They show understanding of environmental print. They identify letter names and apply knowledge of alphabetical order.

### PLEASE NOTE

MAP Growth K–2 items have audio and sometimes little or no text on the screen.

The example items present the visual of the item and we include text in the examples to show what the student hears when the text is absent from the screen.

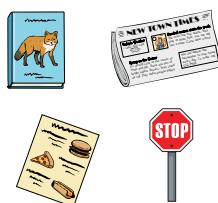
## below 131



(Audio only; the answer options are the only text on screen.)

**Look at the objects.**

**Which of the objects means stop?**

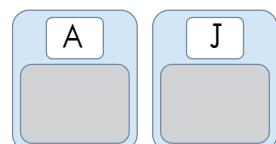


## 131–140



**Look at the letters.**

**Move the matching letters to the boxes.**



M      J      F      A      S

## 141–150

## 151–160

## 161–170



**Look at the sentence.**

**Which word has a capital letter?**



The tree is tall and green.



**Look at the book.**

**Choose the part of the book that shows the author.**



(Audio plays text on book when selected.)

## 171–180

## 181–190

## above 190



**Look at the words.**

**Choose the exclamation mark.**

Concepts of Print is not applicable at this RIT range

**Put the words in ABC order.**

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

jam    lake    king

Why can't I go? Mom, I really want to go, too!

# READING K–2 | WORD STRUCTURE AND MEANING

## Word Structure and Meaning

Students compare word relationships and use context clues. They analyze words for compounds, roots, and affixes. They show understanding of content vocabulary.

### PLEASE NOTE

MAP Growth K–2 items have audio and sometimes little or no text on the screen.

The example items present the visual of the item and we include text in the examples to show what the student hears when the text is absent from the screen.

## 141–150



**Listen to the clues: It runs. It has legs. It has fur.**

**Which picture matches all the clues?**



(Audio plays names of pictures when selected: turtle, boy, dog, truck.)

## 171–180



**Listen to the passage.**

Max looked out the window on the bus ride. For just a moment, he got a **glimpse** of the new toy store. Very soon, the bus had passed it, and the store was out of sight again.

**What does the word glimpse mean in the passage?**

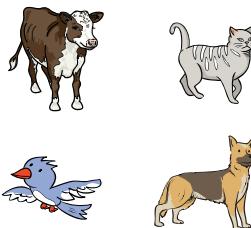
- |            |              |
|------------|--------------|
| a new toy  | a quick look |
| a bus stop | a daydream   |

## below 131



**Look at the pictures.**

**Choose the picture of the bird.**



## 151–160



**Look at the list of fruit.**

**Move ALL the words that are fruits to the paper to complete the list.**

Fruits	
<input type="radio"/>	cherry
<input type="radio"/>	grape
<input type="radio"/>	pineapple
<input type="radio"/>	

apple      horse      banana      truck

## 131–140



**Look at the pictures.**

**Choose the picture of the bathtub.**



## 161–170



**Listen to the sentence.**

The dog jumped over the buckets.

**Which word has an ending that means “in the past”?**



## 181–190



**What does preview mean?**

- |               |                |
|---------------|----------------|
| not to view   | to view poorly |
| to view again | to view before |

## above 190



**Which pair of words means the same thing?**

- |               |                |
|---------------|----------------|
| get – offer   | define – need  |
| require – get | need – require |

# READING K–2 | COMPREHENSION

## Comprehension

Students understand what they hear read aloud and what they read independently in both literary and informational texts.

### PLEASE NOTE

MAP Growth K–2 items have audio and sometimes little or no text on the screen.

The example items present the visual of the item and we include text in the examples to show what the student hears when the text is absent from the screen.

## below 131



(This is a listening comprehension item. The passage is not presented here.)

**Listen to the story.**

**Which picture shows where the story takes place?**



## 131–140



**Look at the pictures.**

**Maureen wants to learn more about taking care of dogs.**

**Which book should Maureen read?**



## 141–150

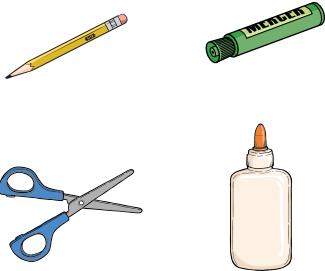
## 151–160



(This is a listening comprehension item. The passage is not presented here.)

**Listen to the story.**

**What does Jayna do before she eats breakfast?**



## 161–170



**Read the table of contents.**

**Which page has information about dogs?**

Wolves .....	6
Foxes.....	10
Dogs .....	14
Bears.....	20
Cats.....	25

## 171–180

## 181–190



(Passage is not read aloud).

**Read the passage.**

Mr. Lee made lunch for his sons each day. Each son liked some foods best. The oldest son liked nuts and fruit. The middle son liked fruit and string cheese. The youngest son liked soup, fruit, and juice.



**Which food did every son like?**

juice

fruit

soup

nuts

## above 190



(Passage is not read aloud).

**Read the passage.**

Birds go places other animals cannot. Robins build their nests high up in trees. There is a good reason for this. It is safer that way. Robins stay in their nests to protect their babies. But sometimes they must leave the safety of the nest. Robin parents need to find food like worms and berries. Leaving the baby robins would be dangerous if the nests were on the ground. Other animals could get to the baby birds. But since the nests are in trees, few animals can reach them. Baby robins are safer in trees than on the ground.

**What is the main idea of the passage?**

Birds go places other animals cannot. Robins stay in their nests to protect their babies. Baby robins are safer in trees than on the ground. Robin parents need to find food like worms and berries.

# READING K–2 | WRITING

## Writing

Students use steps in the writing process. They know conventions of standard English grammar and usage. They show understanding of correct capitalization, punctuation, and spelling.

### PLEASE NOTE

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The example items present the visual of the item and we include text in the examples to show what the student hears when the text is absent from the screen.

## below 131



**Look at the picture.**

**Put the apple on the table.**

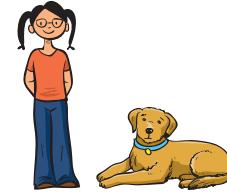


*(Student can move apple on, under, above, or to either side.)*

## 131–140



**Look at the picture.**



**Where is the dog?**

behind the girl  
next to the girl  
on the girl  
below the girl

## 141–150



*(Audio only; dictated sentence not on screen.)*

**Listen to the sentence: The boys are wet.**

**Move the words to the line to write the sentence.**



are    boys    The    wet

## 151–160



**Look at the picture.**

**Use ALL the words to write a sentence about the picture.**



a    gets    He    book

## 161–170



**Look at the sentence that has a mistake.**

**Which word should begin with a capital letter?**



The class pet mouse is named marilyn.

## 171–180



*(Audio only; text showing correct spelling is not on screen)*

**Read the sentence that has a circled mistake.**

**The word “many” is not spelled correctly. Use the letters to spell the word “many” correctly.**



a    e    g    i    m    n    u    w    y

## 181–190



**Read the draft that Aziz wrote.**

I think my dog Rascal is nice. His fur is nice.  
When he licks my face, it is nice. When we play  
fetch, it is nice. He cuddles with me, and that is nice.  
Rascal is a nice pet.

**What is the best way that Aziz can make the draft better?**

- He can make the story shorter.
- He can use the word “nice” more.
- He can make the sentences shorter.
- He can use other words for the word “nice.”

## above 190



**Read the sentences.**

**Put the sentences in the best order to make a paragraph.**

O			

When they finally got home, they made an apple pie.  
Gabe was busy on Sunday afternoon.  
First, his mom took him to the park.  
At the grocery store, Gabe chose apples.  
After the park, they went to the grocery store.



**225**



## Understanding RIT Scores and the Reference Charts

MAP Growth tests produce scores that make it possible to monitor student growth from year to year along developmental scales. The charts that follow show examples of the kinds of work students do at various points along the MAP Growth RIT scale, assuming they have been exposed to content.

**200**



**190**



**175**



**150**

### Question Difficulty and the RIT Scale

These charts demonstrate the relationship between question difficulty and our RIT scale:

- For any MAP Growth score, students will answer questions at or near that score correctly about half the time.
- Questions with lower RIT will be answered correctly more frequently.
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### PLEASE NOTE

Each subject area has a unique alignment to the RIT scale. As a result, scores between subjects are not equivalent.

Test items in this booklet are sample items, and many have not been calibrated or field tested. For purposes of this document, RIT scale alignment is an approximation.

## Word Meaning: Word Origins, Word Relationships, and Semantics

Students decode words, recognize common words, and understand word relationships. They use context clues and reference materials to decipher word meaning and nuance.

**PLEASE NOTE** Some passages have been truncated due to space considerations.

## below 161

Choose the word that matches the picture.



The dog has a \_\_\_\_\_ in his mouth.

1. ball
2. bone
- ✓ 3. flower**
4. shoe

## 161–170

Use the sentences and the glossary to answer the question.

Dinah and her sister went to the **market**. They saw many kinds of **produce**. Dinah wanted peas. Her sister wanted strawberries.

**Glossary**

**market** a place to sell food  
**produce** fruits and vegetables

What is another kind of **produce**?

- |                    |          |
|--------------------|----------|
| <b>✓ 1.</b> apples | 3. money |
| 2. cookies         | 4. trees |

## 171–180

Read the sentences.

Jackie couldn't believe how much fun she had on the field trip. She kept **replaying** the day's events in her mind on the bus ride back to school.

In the word **replaying**, what does the prefix **re-** mean?

1. after
- ✓ 2. again**
3. not
4. two

## 181–190

Read the sentences.

My friend Chris always does what he promises to do. If he says he'll meet me after school, he is always there waiting for me. Chris is a **reliable** friend.

What does **reliable** mean?

1. friendly
2. bright
- ✓ 3. dependable**
4. capable

## 191–200

Read the sentences.

Lightning \_\_\_\_\_ the trunk of the lilac tree.  
I was \_\_\_\_\_ by the beauty of the sunset.

Which word can be used in **both** sentences?

1. bent
2. flashed
- ✓ 3. struck**
4. surprised

## 201–210

Which set of words **all** have the same root word?

1. extra, relax, index
2. contain, restrain, plain
3. here, everywhere, there
- ✓ 4. knowledge, unknown, knowing**

## 211–220

Read the sentence.

Although the storm outside was **ferocious**, Nate left the comfort of the cabin and trudged toward home.

Which word **best** matches the connotative meaning of **ferocious** as it is used in the sentence?

1. barbaric
2. inhuman
- ✓ 3. intense**
4. untamed

## 221–230

Read the sentence and dictionary entry.

The lives saved when the volcano exploded **vindicated** the expensive early warning system.

**Dictionary**

**vindicate** (vin-di-keyt) *v.*

1. to free from an accusation
2. to justify based on evidence
3. to defend against opposition
4. to claim for oneself or for someone else

Which definition of **vindicate** is used in the sentence?

1. definition 1
- ✓ 2. definition 2**
3. definition 3
4. definition 4

## above 230

Based on an understanding of Latin roots, what is the meaning of **ambidextrous**?

1. walks quickly
2. before the flood
3. lives on land and in water
- ✓ 4. can use both hands equally well**

**Literary Concepts: Main Ideas, Details, and Inferences**

Students read and comprehend literary texts, make inferences and predictions, and draw conclusions. They determine main ideas, analyze the development of themes, and summarize.

**PLEASE NOTE** Some passages have been truncated due to space considerations.

**below 161****Read the story.**

Mother was ready. She had streamers and balloons. She baked a cake. She invited Sandy's friends. She asked them not to tell Sandy. Sandy would come home from school. Her friends would shout when she turned on the lights!

**What is Sandy's mother planning?**

1. Sandy's first day at school
2. a picnic in the backyard
- ✓ 3. Sandy's surprise party
4. a trip to the bakery

**161–170****Read the passage.**

I can't wait for winter vacation to start! Every day feels like a holiday! I love to have snowball fights with my friends and make snowmen in the yard.  
*(Passage continues.)*

**Which word best describes how the author feels about winter vacation?**

1. calm
- ✓ 2. excited
3. nervous
4. tired

**171–180****Read the paragraph.**

Gordon loves to visit his aunt and uncle in Vermont. He goes up every summer to visit them. They live on a houseboat on the lake.  
*(Passage continues.)*

**What does Gordon like to do best?**

1. swim in the lake
2. fish for perch and trout
3. read books on the boat deck
- ✓ 4. steer the boat around the lake

**181–190****Read the passage.**

The wind whipped the tops of the trees so they looked like they were dancing. Clouds raced across the sky. Leaves and bits of paper swirled around.  
*(Passage continues.)*

**Which sentence best tells what the story is about?**

- ✓ 1. There is a big rainstorm coming.
2. They are having fun in the snow.
3. There is a double rainbow in the sky.
4. They are cleaning up after a big storm.

**191–200****Read the passage.**

Molly stared out the bus window with blank eyes. Next to her, a woman pulled herself up. She got off at the next stop. Molly looked over and saw that the woman had left something on the seat.  
*(Passage continues.)*

**What was Molly's first reaction when she picked up the wallet?**

1. to look at the pictures
2. to call after the woman
3. to stare out the bus window
- ✓ 4. to turn it in to the bus driver

**201–210****Read the passage.**

Celina's eye glanced around in disgust. Everywhere she looked there was trash. A crushed aluminum soda can discarded over here. An empty crumpled-up chip bag tossed over there. It made her red with rage. Celina finally took a deep breath and slowly trudged into the grocery store.

"Hey, Celina, what's wrong?" the owner of the store, Mrs. Jones, asked. *(Passage continues.)*

**Which is the most likely theme of this passage?**

1. Kids are usually very smart.
2. It is better to follow than lead.
3. People litter without knowing it.
- ✓ 4. Everyone can make a difference.

**211–220****Read the passage.**

He lived on the bank of a mighty river, broad and deep, which was always silently rolling on to a vast undiscovered ocean. It had rolled on, ever since the world began. It had changed its course sometimes, and turned into new channels, leaving its old ways dry and barren. *(Passage continues.)*

(from "Nobody's Story" by Charles Dickens)

**What is a central idea of this passage?**

1. It is hard to swim against the tide.
2. The river supports life on its banks.
3. Earth will continue to circle around the Sun.
- ✓ 4. The flow of the river to the ocean is unchanging.

**221–230****Read the passage.**

Bernadou clung to his home with a dogged devotion. He would not go from it to fight unless compelled, but for it he would have fought like a lion.  
*(Passage continues.)*

(from "A Leaf in the Storm" by Marie Louise de la Ramée)

**Based on the passage, which statement about Bernadou is most likely true?**

1. Bernadou had traveled to the capital of his country many times.
2. Bernadou was a drifter, never spending much time in any one place.
- ✓ 3. Bernadou would fight with loyalty and fierceness for any good cause.
4. Bernadou felt a strong connection to his hometown, but not his country.

**above 230****Read the passage.**

Elizabeth Bennet had been obliged, by the scarcity of gentlemen, to sit down for two dances; and during part of that time, Mr. Darcy had been standing near. *(Passage continues.)*

(from Pride and Prejudice by Jane Austen)

**How is Elizabeth Bennet influenced by the dialogue between Mr. Darcy and Mr. Bingley?**

1. Because Elizabeth overhears Mr. Darcy's insulting comments, she insists on sitting alone rather than dance with him.
2. Elizabeth discovers that Mr. Darcy's refusal to dance is due to his shy nature and forgives his behavior.
- ✓ 3. Despite believing that Mr. Darcy is impolite and self-important, Elizabeth maintains an upbeat attitude.
4. Elizabeth develops a new, playful sense of humor around Mr. Darcy to draw him out of his foul mood.

# READING | LITERARY CONCEPTS: PURPOSE, STRUCTURE, AND DEVICES

## Literary Concepts: Purpose, Structure, and Devices

Students analyze the structure of literary texts and analyze literary elements of a text, such as plot, character, theme, and setting. They analyze literary devices and evaluate the author's craft.

**PLEASE NOTE** Some passages have been truncated due to space considerations.

**below 161**

**161–170**

**171–180**

### Read the story.

Maria ate a big bowl of cereal. After breakfast, Maria put her book in her backpack. (*Passage continues.*)

### What does Maria do first?

1. She puts on her coat.
- ✓ 2. She eats her breakfast.
3. She walks to the bus stop.
4. She puts her book in her backpack.

### Read the story.

Rita was walking to the library one day in the rain. There were many people out on the streets. . . (*Passage continues.*)

### What causes Rita to trip over the curb?

1. her bag of books
2. walking in the rain
3. people on the streets
- ✓ 4. talking on the phone

### Read the passage.

Dave and Mike had a great time sledding. They pulled their sleds up the big hill and went down face first. (*Passage continues.*)

### What do Mike and Dave do right after playing outside?

1. They race down the hill.
2. They fall asleep on the couch.
- ✓ 3. They have grilled cheese and soup.
4. They pull their sleds up the big hill.

**181–190**

**191–200**

**201–210**

### Read the passage.

Scott opened his eyes and looked at the clock. He pulled the blankets over his head to keep the sun out. He yawned and closed his eyes. He just wanted to go back to sleep.

### What does the author's short description tell the reader about Scott?

1. He is lazy.
- ✓ 2. He is tired.
3. He is scared.
4. He is hungry.

### Read the passage.

Laura's teacher asked to see the science project. "But Mrs. Thompson, I forgot it was due today!" Laura said. Then Laura asked if she could call her mom. "Mom, can you bring my science project to school? It's due today!" She listened to her mother for a moment. (*Passage continues.*)

### How do readers learn about Laura?

1. from what Laura looks like
2. from what other characters say
- ✓ 3. from what Laura says to others
4. from descriptions of Laura's feelings

### Read the passage.

The clouds lifted, and the pilot sighted the tower of The City Airport. He had already radioed ahead that he was arriving. (*Passage continues.*)

### What is the best title for this passage?

1. A Pilot's Life
- ✓ 2. A Safe Landing
3. The City Airport
4. One Cloudy Night

**211–220**

**221–230**

**above 230**

### Read the passage.

Many years ago, a young man named Takoda decided to go on foot to Dark Mountain, a three-day journey from his village. Two days into his journey, he paused for nourishment in a narrow valley. (*Passage continues.*)

### How does the setting contribute to Takoda's main problem in the story?

1. He is unable to see clearly through dust from the valley floor.
2. He is unable to find shelter from threatening weather on the valley floor.
3. The valley does not provide him with the nourishment he needs for his journey.
- ✓ 4. The valley does not provide him with an easy way to avoid the buffalo stampede.

### Read the poem excerpt.

I saw the different things you did,  
But always you yourself you hid.  
I felt you push, I heard you call,  
I could not see yourself at all—  
O wind, a-blowing all day long,  
O wind, that sings so loud a song!  
(from "The Wind" by Robert Louis Stevenson)

### What is the rhyme scheme?

1. AAA BBB
2. ABB ACC
- ✓ 3. AAB BCC
4. ABC ABC

### Read the poem.

Hope is the thing with feathers  
That perches in the soul,  
And sings the tune without the words,  
And never stops at all. (*Poem continues.*)  
(from "Hope" by Emily Dickinson)

### Which statement best expresses the meaning of the extended metaphor that compares hope to a bird throughout the poem?

- ✓ 1. Hope is a constant presence and gives people comfort.
2. Hope flies away like a bird during storms and difficult times.
3. Hope is demanding, like a bird that constantly needs to be cared for.
4. Hope tries to sing songs that are uplifting but forgets the words to them.

**Informational Concepts: Main Ideas, Details, and Inferences**

Students read and comprehend informational texts, make inferences and predictions, and draw conclusions. They determine main ideas, analyze the development of arguments, and summarize.

**PLEASE NOTE** Some passages have been truncated due to space considerations.

**below 161****Read the passage.**

Many kinds of dogs live in the world. Some have been around for a long time.  
(Passage continues.)

**What do Mudis like?**

1. other dogs
2. sleeping all day
3. living in the city
- ✓ 4.** having work to do

**161–170****Read the passage.**

This is how you make lemonade. It is fun and easy... (Passage continues.)

**What is this passage about?**

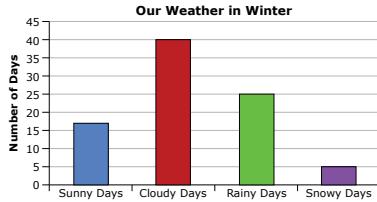
1. where to buy lemons
- ✓ 2.** how to make lemonade
3. when to make lemonade
4. what lemonade tastes like

**171–180****Read the paragraph.**

A hen lays about one egg a day. A chick takes three weeks to be born from an egg.  
(Passage continues.)

**When do chicks start peeping?**

1. after one week
2. after two weeks
- ✓ 3.** after three weeks
4. after four weeks

**181–190****Read the graph.****What kind of weather happens most often?**

1. sunny
- ✓ 2.** cloudy
3. rainy
4. snowy

**191–200****Read the paragraph.**

Weasels are hunters. They prey on mice, rats, insects, and birds. They will attack larger animals such as rabbits and chickens, too.  
(Passage continues.)

**What does the weasel do when it gets more food than it needs?**

1. It eats until it is sick.
- ✓ 2.** It stores the food for later.
3. It lets the food go to waste.
4. It shares the food with others.

**201–210****Read the paragraph.**

Platinum is a silver-white metal that is even more valuable than gold. It will not corrode or tarnish as many metals do when exposed to air. It can be used as a catalyst\* in processes that change harmful pollutants into nonpollutants. (Passage continues.)

\*catalyst: a substance that can speed up or bring about a chemical reaction without being affected itself

**According to the passage, why is platinum valued by jewelers?**

1. It is rarer than gold.
- ✓ 2.** It is good for gem settings.
3. It can be used as a catalyst.
4. It is produced in many countries.

**211–220****Read the passage.****Benjamin Franklin: More than a Writer**

Many people today use bifocals, eyeglasses that aid people's vision for objects both near and far away. Some people use cast-iron wood-burning stoves to heat their homes. (Passage continues.)

**Which aspect of the passage best supports the idea that Franklin was a creative visionary?**

1. the danger associated with Franklin's famous kite-flying experiment
2. the mention of Franklin's role in writing the Declaration of Independence
- ✓ 3.** the example of the wide range of inventions that Franklin developed
4. the similarities between today's bifocals and the bifocals that Franklin invented

**221–230****Read the passage.**

We observe today not a victory of party but a celebration of freedom—symbolizing an end as well as a beginning—signifying renewal as well as change. For I have sworn before you and Almighty God the same solemn oath our forbears prescribed nearly a century and three-quarters ago. (Passage continues.)  
(from "Inaugural Address" by John F. Kennedy)

**Which statement best expresses the main idea of the passage?**

1. Well-equipped armies will fight to defend freedom.
2. Global alliances are the key to freedom for all people.
- ✓ 3.** The responsibilities of freedom rest with the individual.
4. The past generations have secured freedom for the future.

**above 230****Read the passage.**

The efficiency of a book is like that of a man, in one important respect: its attitude toward its subject is the first source of its power. A book may be full of good ideas well expressed, but if its writer views his subject from the wrong angle even his excellent advice may prove to be ineffective. (Passage continues.)  
(from *The Art of Public Speaking* by J. Berg Esenwein and Dale Carnegie)

**Which conclusion about becoming an effective speaker can be drawn from the passage?**

1. Effective speaking is the result of study followed by earnest practice.
2. Effective speaking requires training in and adherence to a specific set of rules.
- ✓ 3.** Effective speaking requires self-discipline and personal conviction about the topic.
4. Effective speaking is the result of practicing the speeches and styles of noted speakers.

## Informational Concepts: Purpose, Structure, and Argument

Students analyze the structure of informational texts, evaluating texts for bias and for the quality of claims and evidence. They evaluate the author's craft, determining the author's point of view and purpose.

**PLEASE NOTE** Some passages have been truncated due to space considerations.

### below 161

#### Read the chart.

Favorite Sports			
Baseball	Basketball	Soccer	Swimming
Neha Max Jessica	Samuel	Javier Sarah Brandon Codey	Addison Julia

#### Which sport do the most children like?

- ✓ 1. soccer
- 2. baseball
- 3. basketball
- 4. swimming

### 161–170

#### Read the chart.

Music	Piano	Drum	Bass	Guitar
Jazz	X	X	X	
Pop	X	X		X
Rock		X	X	X
Country		X	X	X

#### Which two types of music have the most instruments in common?

- 1. jazz and pop
- 2. pop and rock
- 3. country and jazz
- ✓ 4. country and rock

### 171–180

#### Read the passage.

The best place to go on vacation is Florida. There are beautiful beaches, large hotels, good restaurants, and interesting shops.  
*(Passage continues.)*

#### What is the author's opinion of Florida?

- 1. Florida has no variety.
- 2. The weather is too hot.
- ✓ 3. Florida is a great place to visit.
- 4. Only boaters will enjoy Florida.

### 181–190

#### Read the passage.

[1] One of the most famous bad guys in history was Robin Hood. [2] People think he lived in England and hid in the forest with his friends. *(Passage continues.)*

#### Which sentence reveals the author's opinion of Robin Hood?

- 1. sentence 2
- 2. sentence 3
- 3. sentence 4
- ✓ 4. sentence 5

### 191–200

#### Read the passage.

There are many differences between the ancient Olympics and the games of today. In ancient times, the games were held only during the summer, but today the games are held during summer and winter. *(Passage continues.)*

#### Which organizational structure is used in this passage?

- 1. cause and effect
- 2. sequence of events
- 3. order of importance
- ✓ 4. compare and contrast

### 201–210

#### Read the passages.

##### Review 1

Happy Birthday, Maudie is a delightful movie. The characters are believable, and the plot is a tender love story. *(Passage continues.)*

##### Review 2

Don't bother to see Happy Birthday, Maudie. It's a sappy movie about a girl who lets everyone push her around. *(Passage continues.)*

#### Based on the descriptions in the two reviews, on which topic are the two reviewers most likely to agree?

- 1. the quality of the plot
- ✓ 2. the details of the setting
- 3. the overall quality of the movie
- 4. the main character's personality

### 211–220

#### Read the passage.

##### A Unique Creature: The Thorny Devil

The thorny devil is a very interesting and unusual creature. From its name, one might guess that it is large and scary. *(Passage continues.)*

#### Which explanation is the most likely reason the author includes a chapter heading in this passage?

- 1. to explain background information about the subject
- ✓ 2. to provide an idea of what the selection will be about
- 3. to present information about key vocabulary terms
- 4. to supply reasons why this is an interesting subject

### 221–230

#### Read the report excerpt.

Over the last century, the amount of precipitation has increased significantly across eastern parts of North America. *(Passage continues.)*

(from "Adaptation Options for Climate-Sensitive Ecosystems and Resources" by the U.S. Environmental Protection Agency)

#### Which feature of this text most assures the validity of the information?

- 1. the vocabulary
- 2. the author's tone
- ✓ 3. the use of citations
- 4. the use of percents

### above 230

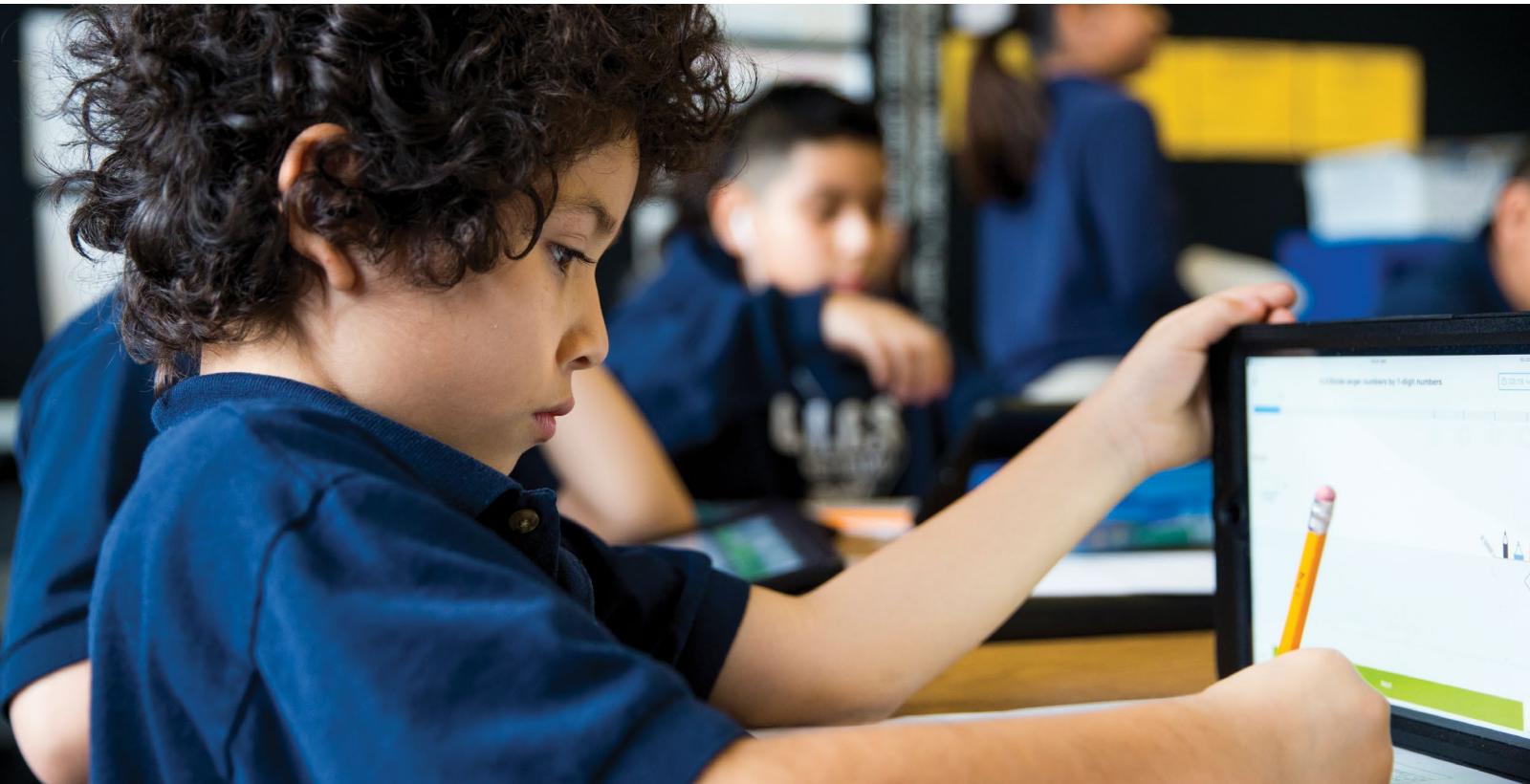
#### Read the text written by a company that organizes scientific research into a database.

Our Mission: Our database of more than 3,000 articles of documented investigations is an easy-to-use tool for scientific research. Users may look for a general topic or narrow their search through the use of three topic code parameters. *(Passage continues.)*

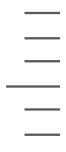
Topic Code Parameters	Description
Social Context	Who conducted the research? Where was it conducted?
Method	How was the research conducted? What procedures were used?
Findings	What was observed? What results were achieved?

#### How does the chart complement the text?

- 1. It summarizes the text.
- ✓ 2. It provides detail not in the text.
- 3. It serves to contrast information in the text.
- 4. It provides a transition between the two parts of the text.



**225**



## Understanding RIT Scores and the Reference Charts

MAP Growth tests produce scores that make it possible to monitor student growth from year to year along developmental scales. The charts that follow show examples of the kinds of work students do at various points along the MAP Growth RIT scale, assuming they have been exposed to content.

**200**



**190**

### Question Difficulty and the RIT Scale

These charts demonstrate the relationship between question difficulty and our RIT scale:

- For any MAP Growth score, students will answer questions at or near that score correctly about half the time.
- Questions with lower RIT will be answered correctly more frequently.
- Questions of higher RIT will be answered correctly less frequently. More difficult questions will probably require new learning on the part of the student.

### PLEASE NOTE

Each subject area has a unique alignment to the RIT scale. As a result, scores between subjects are not equivalent.

**150**



Test items in this booklet are sample items, and many have not been calibrated or field tested. For purposes of this document, RIT scale alignment is an approximation.

# LANGUAGE USAGE | MECHANICS

## Mechanics

Students understand the conventions of capitalization, punctuation, and spelling.

**PLEASE NOTE** Some passages have been truncated due to space considerations.

below **161**

**161–170**

**171–180**

### Which sentence is punctuated correctly?

- 1. Do flowers bloom in the spring!
- ✓ 2. Do flowers bloom in the spring?
- 3. Do flowers bloom in the spring,
- 4. Do flowers bloom in the spring.

### Read the sentence, and then choose the word that should begin with a capital letter.

My **art teacher** gave the **note** to **mrs.** Keegan.

### Which word is always capitalized?

- ✓ 1. i
- 2. me
- 3. us
- 4. we

**181–190**

**191–200**

**201–210**

### What is the correct spelling for more than one berry?

- ✓ 1. berries
- 2. berryes
- 3. berrys
- 4. berryses

### Which sentence correctly uses quotation marks?

- 1. "What's that? I asked."
- ✓ 2. Mom said, "Go clean your room."
- 3. "Mr. Ramirez said, Get in the car."
- 4. "Dad," I asked, "can I feed the fish?"

### Which sentence has all the words capitalized correctly?

- 1. He said, "The Tide is Coming In."
- 2. He said, "The Tide is coming in."
- 3. He said, "the tide is coming in."
- ✓ 4. He said, "The tide is coming in."

**211–220**

**221–230**

**above 230**

### Which sentence is punctuated correctly?

- 1. Pilar watch out for the bees in the garden.
- 2. It seems to us, Mr. Jones that the trip should be canceled.
- 3. What are you going to do after practice tonight Tom?
- ✓ 4. If you ask me, Lorraine, this bus schedule is outdated.

### Read the sentence.

The band director tries to **acommodate** requests from the band members who want to practice in the band room after school.

### How should **acommodate** be spelled?

- ✓ 1. accommodate
- 2. accomodate
- 3. acommodate
- 4. acomodate

### Proofread Carla's paragraph.

I live in an area known as the great **southwest**—in Taos, New Mexico. Taos is a town well known for its art, history, and recreation. Located just **north** of the Santa Fe National Forest, Taos offers visitors the chance to ski during the winter months. There are also several museums whose goal it is to preserve artwork from the **northern** part of New Mexico. There are even more options for exploration nearby; Taos is only 40 miles **northeast** of Santa Fe, the capital of New Mexico.

### Which underlined word should be capitalized?

- ✓ 1. southwest
- 2. north
- 3. northern
- 4. northeast

## Parts of Speech

Students understand the different parts of speech.

**PLEASE NOTE** Some passages have been truncated due to space considerations.

below 161

161–170

171–180

**Read the sentence.**

The dog \_\_\_\_\_ in the house.

**Which word belongs in the blank?**

- 1. am
- ✓ 2. is**
- 3. are
- 4. were

**Read the sentence.**

I went with my mom to buy a \_\_\_\_\_ of bananas.

**Which word best completes the sentence?**

- ✓ 1.** bunch
- 2. group
- 3. pile
- 4. set

**Read the sentence.**

Greg is \_\_\_\_\_ his father, George.

**Which phrase best completes the sentence?**

- 1. tallest than
- 2. taller from
- ✓ 3.** taller than
- 4. tall than

181–190

191–200

201–210

**Read the sentence.**

The student wrote a report \_\_\_\_\_ Abraham Lincoln, our sixteenth president.

**Which preposition would best complete the sentence?**

- 1. in
- 2. from
- ✓ 3. about**
- 4. with

**Read the sentence.**

I \_\_\_\_\_ John to play his guitar for us until he finally agrees.

**Which word or phrase best completes the sentence?**

- 1. ask
- 2. asked
- ✓ 3.** will be asking
- 4. will have been asking

**Read the sentences.**

It doesn't matter who goes first. It could be \_\_\_\_\_. Elena \_\_\_\_\_ Jace, since the order is not important.

**Which pair of conjunctions correctly completes the second sentence?**

- ✓ 1.** either, or
- 2. both, and
- 3. neither, nor
- 4. not only, but also

211–220

221–230

above 230

**Read the sentence.**

Suzanne and Marissa \_\_\_\_\_ an entire afternoon at the amusement park.

**Which verb phrase uses active voice to complete the sentence?**

- ✓ 1.** had the chance to spend
- 2. are being invited to spend
- 3. have been chosen to spend
- 4. were given an invitation to spend

**Read the sentence.**

Smiling at the cashier, the friendly girl counted her coins and said, "Thank you."

**What is the function of the phrase smiling at the cashier in the sentence?**

- ✓ 1.** It acts as an adjective that modifies the noun "girl."
- 2. It acts as a noun that is the subject of the sentence.
- 3. It acts as an adverb that modifies the verb "counted."
- 4. It acts as a verb that expresses the girl's state of mind.

**Which sentence shows clear pronoun-antecedent agreement?**

- 1. We unpacked our books from the boxes and then returned them to the office.
- 2. As soon as the monkeys left their cages, the janitors cleaned them.
- 3. Samantha put her jacket in the locker room and then forgot where it was located.
- ✓ 4.** For English class, the students had to memorize a monologue by their favorite playwright.

**Usage**

Students understand the conventions of grammar, usage, and sentence structure.

**PLEASE NOTE** Some passages have been truncated due to space considerations.

**below 161****Which sentence asks a question?**

1. Today is a rainy day.
- ✓ 2. Where is my green hat?
3. Stay away from that puddle!
4. I know how to write my name.

**161–170****Which sentence gives a command?**

- ✓ 1. Meet me at the park on Saturday.
2. Summer is my favorite time of the year.
3. Jack went swimming at the pool last August.
4. Tasha lives in the same building as her best friend.

**171–180****Read the sentences.**

Aunt Carrie wants to sit down. All the chairs are very uncomfortable.

**What is the best way to combine the sentences into one sentence?**

1. Aunt Carrie wants to sit down, so all the chairs are very uncomfortable.
2. Aunt Carrie wants to sit down, or all the chairs are very uncomfortable.
- ✓ 3. Aunt Carrie wants to sit down, but all the chairs are very uncomfortable.
4. Aunt Carrie wants to sit down, nor all the chairs are very uncomfortable.

**181–190****Read the sentence.**

Erika enjoys playing the drums whenever she has a little bit of free time.

**What is another way to write the sentence without changing its meaning?**

1. Erika enjoys a little bit of free time playing the drums whenever.
2. Erika enjoys free time whenever she is playing the drums a little bit.
3. Whenever she is playing the drums, Erika enjoys a little bit of free time.
- ✓ 4. Whenever she has a little bit of free time, Erika enjoys playing the drums.

**191–200****Read the sentence.**

My friend and his brother \_\_\_\_\_ their grandmother on the phone every day.

**Which word belongs in the blank?**

- ✓ 1. call
2. calls
3. caller
4. calling

**201–210****Read the sentence fragment.**

Each penguin in the pool.

**Which change makes the fragment a complete sentence?**

1. Each penguin in the deep pool.
- ✓ 2. Each penguin in the pool swam.
3. Each and every penguin in the pool.
4. Each little penguin in the deep pool.

**211–220****Read the run-on sentence.**

Jason took the cooking utensils out of the cupboard and found the recipe book he put on an apron and prepared to make a delicious feast.

**What is another way to write the sentence without changing its meaning?**

- ✓ 1. Jason took the cooking utensils out of the cupboard and found the recipe book. He put on an apron and prepared to make a delicious feast.
2. Jason took the cooking utensils out of the cupboard and found the recipe book. He put on an apron and prepared: to make a delicious feast.
3. Jason took the cooking utensils out of the cupboard, and found the recipe book. He put on an apron, and prepared to make a delicious feast.
4. Jason took the cooking utensils out of the cupboard, and found the recipe book, he put on an apron, and prepared: to make, a delicious feast.

**221–230****Read the draft of Talia's paragraph.**

The tallest mountain in the world is Mount Everest. Its elevation is 29,035 feet. It was summited in 1953 for the first time.

**Talia wants to combine these statements into one sentence.****Which sentence best combines these statements?**

1. The tallest mountain, at 29,035 feet, in the world is Mount Everest and it was first summited in 1953.
2. The tallest mountain in the world, Mount Everest (29,035 feet peak elevation), was first successfully summited in 1953.
- ✓ 3. Mount Everest, the tallest mountain in the world with an elevation of 29,035 feet, was summited in 1953 for the first time.
4. First successfully summited in 1953, the tallest mountain, Mount Everest, in the world has a peak elevation of 29,035 feet.

**above 230****Read the passage.**

One strength I possess is the ability to solve problems. I am flexible in the types of problems I can solve and in the ways I can solve them. I excel at problem solving, both independently and when collaborating with others.

**Lee wants to revise the final sentence so that it uses parallel structure.****Which sentence best accomplishes this goal?**

1. I excel at problem solving, both independently and when in a team.
- ✓ 2. I excel at problem solving, both independently and collaboratively.
3. Whether I am working on my own or collaborating, I excel at problem solving.
4. Whether I collaborate with a team or am doing independent work, I excel at problem solving.

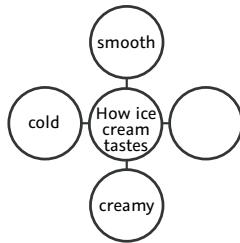
**Writing Process**

Students use various research and writing skills to plan, develop, and revise writing.

**PLEASE NOTE** Some passages have been truncated due to space considerations.

**below 161**

**Study the graphic organizer.**



**Which word would best complete the graphic organizer?**

1. bitter
2. loud
3. salty
- ✓ 4. sweet**

**161–170**

**Which group of words would be best to use to tell about the moon?**

1. soft, small, blue
- ✓ 2. white, round, full**
3. close, green, cold
4. wet, black, square

**171–180**

**Read the paragraph.**

A cat is a great pet to have. To keep your cat healthy, make sure to give it plenty of fresh water. Dogs like to swim. Don't feed your cat human food. For a special treat, you can give your cat some catnip.

**Which sentence should be removed from the paragraph?**

1. A cat is a great pet to have.
- ✓ 2. Dogs like to swim.**
3. Don't feed your cat human food.
4. For a special treat, you can give your cat some catnip.

**181–190**

**Read the paragraph.**

I always look forward to winter for one reason: hot chocolate. Hot chocolate is my favorite. It warms me up when I am really cold.

**Which sentence could be added to describe what hot chocolate tastes like?**

- ✓ 1.** It is sweet and warm and so chocolaty.
2. Hot chocolate comes in different flavors.
3. I have hot chocolate every day in winter.
4. Hot chocolate is drunk by people of all ages.

**191–200**

**Read the paragraph from Kim's opinion piece.**

You'll get the freshest food when you grow it yourself. Fruits and vegetables that have just been picked taste great. Fresh fruits and vegetables also are more nutritious than those that have been sitting in a supermarket for days. In addition, growing your own food can save you money. One package of seeds costs very little, but there are many future plants inside just waiting to be given the chance to grow!

**Which sentence will best introduce Kim's opinion to her readers?**

- ✓ 1.** More people should grow their own fruits and vegetables.
2. I enjoy eating many different kinds of fruits and vegetables.
3. Planting a vegetable garden is as easy as planting a flower garden.
4. I have planted beans, lettuce, cucumbers, and watermelon in my garden.

**201–210**

**Laurie is writing a report on the life of author Louisa May Alcott.**

**Which method of organization will help Laurie to sequence the life of Louisa May Alcott?**

1. a web
2. a graph
- ✓ 3. a timeline**
4. a Venn diagram

**211–220**

**Reynaldo is planning to write a research report about important rivers in the world.**

**Which question will best help Reynaldo research and write his report?**

1. What is your favorite river?
2. Where is the world's longest river?
3. How many times has the Nile River flooded?
- ✓ 4. How are the Nile and Amazon Rivers different?**

**221–230**

**Read the information.**

Tanya is writing about the shift from U.S. isolationism to the nation's declaration of war in 1917. She plans to reference this excerpt from an address given by President Woodrow Wilson.

from **Second Inaugural Address**

We have been deeply wronged upon the seas, but we have not wished to wrong or injure.... (*Passage continues*)

**Why is the address useful for Tanya's assignment?**

- ✓ 1.** It explains Wilson's motivation for involving the country in a war.
2. It provides evidence that Wilson has the support of his audience.
3. It acknowledges the point of view of those who favor isolationism.
4. It describes the possible impact of war on the country's industrial growth.

**above 230**

**Read Debra's memo.**

Thank you for participating in the Sundahl Engineering internship program. As the intern supervisor, I am requesting that all interns complete an experience report. (*Passage continues*)

**Which concluding sentence should Debra add to indicate the action she expects interns to take?**

1. All reports will be read by management, who will then meet with intern supervisors on June 15 to implement student suggestions.
2. Sundahl Engineering wants to provide the best experience for student interns, as our goal is to offer skills and to recruit future employees.
3. We understand that students have many internship opportunities, so know that management thanks you for choosing Sundahl Engineering.
- ✓ 4. To allow time for management to read all the student intern reports and to provide suggestions to staff, please submit your report by June 1.**



**225**



## Understanding RIT Scores and the Reference Charts

MAP Growth tests produce scores that make it possible to monitor student growth from year to year along developmental scales. The charts that follow show examples of the kinds of work students do at various points along the MAP Growth RIT scale, assuming they have been exposed to content.

**200**



**190**

- For any MAP Growth score, students will answer questions at or near that score correctly about half the time.
- Questions with lower RIT will be answered correctly more frequently.
- Questions of higher RIT will be answered correctly less frequently. More difficult questions will probably require new learning on the part of the student.

### PLEASE NOTE

Each subject area has a unique alignment to the RIT scale. As a result, scores between subjects are not equivalent.

**150**



Test items in this booklet are sample items, and many have not been calibrated or field tested. For purposes of this document, RIT scale alignment is an approximation.

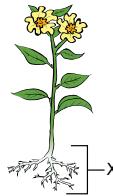
below 181

**Life Sciences**

Students understand the ideas about the structure and function of organisms, how matter and energy move through ecosystems, how heredity affects organisms, and how biological evolution affects the unity and diversity of life.

181–190

**The diagram shows the parts of a plant.**

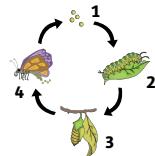


**Which part is labeled with the X?**

- |           |          |
|-----------|----------|
| A. flower | ✓C. root |
| B. leaf   | D. stem  |

191–200

**Students make a model of the life cycle of a butterfly.**



**How should the students label stages 1, 2, and 3?**

- A. egg, pupa, and larva
- B. larva, egg, and pupa
- ✓C. egg, larva, and pupa
- D. pupa, larva, and egg

201–210

**What is a function of the respiratory system in animals?**

- A. to move blood
- B. to detect sound
- ✓C. to obtain oxygen
- D. to break apart food

211–220

**Where does photosynthesis happen in plants?**

- ✓A. chloroplasts
- B. epidermis
- C. roots
- D. stomata

221–230

**A student plans to cross 2 purebred guinea pigs. One has black fur and one has white fur. The color of a guinea pig's fur depends on a single gene pair. Black fur is dominant to white fur.**

**If there are 6 guinea pig offspring, what fur color will they most likely have?**

- A. 3 with black fur and 3 with white fur
- B. 4 with black fur and 2 with white fur
- C. 5 with black fur and 1 with white fur
- ✓D. 6 with black fur and 0 with white fur

231–240

**A cell containing 10 chromosomes divides by mitosis.**

**How many chromosomes will each daughter cell contain?**

- A. 5
- ✓B. 10
- C. 15
- D. 20

above 240

**Why is DNA the storage molecule for hereditary information?**

- A. It contains the nitrogenous base uracil.
- B. It contains strong covalent bonds.
- ✓C. It can be replicated and transcribed.
- D. It translates the genetic code.



below 181

**Physical Sciences**

Students understand the ideas about the interactions of matter, the relationship between force and motion, and how energy forms transfer and transform.

**Which is a solid?**

- A. air
- B. milk
- ✓C.** rock
- D. water

181–190

Emilio is preparing lemonade. He first mixes 100 g of lemon juice with 400 g of water. He then adds 200 g of sugar.

**How much does the lemonade weigh?**

- A. 200 g
- B. 400 g
- C. 500 g
- ✓D.** 700 g

191–200

201–210

211–220

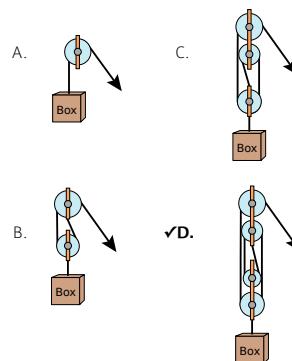
A student experiments with magnets.

Which group of magnets has attractive forces between all 3 magnets?

- ✓A.**   
- B.   
- C.   
- D.   

Students designed four pulley systems to lift a box.

Which pulley system will lift the box with the LEAST input force?



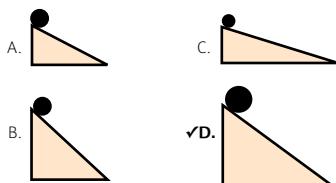
221–230

231–240

above 240

Solid steel balls are located on ramps as shown.

Which ball has the greatest gravitational potential energy?



What is the hydronium concentration of a basic solution?

- A.  $[H^+] = 1 \times 10^9$
- ✓B.**  $[H^+] = 1 \times 10^{-9}$
- C.  $[H^+] = 1 \times 10^1$
- D.  $[H^+] = 9 \times 10^{-1}$

Which chemical equation represents a neutralization reaction?

- A.  $\text{CaCO}_3(s) \rightarrow \text{CO}_2(g) + \text{CaO}(s)$
- B.  $2\text{HCl}(aq) + 2\text{K}(s) \rightarrow 2\text{KCl}(aq) + \text{H}_2(g)$
- C.  $\text{CH}_4(g) + \text{O}_2(g) \rightarrow \text{CO}_2(g) + \text{H}_2\text{O}(g)$
- ✓D.**  $\text{NaOH}(aq) + \text{HCl}(aq) \rightarrow \text{NaCl}(aq) + \text{H}_2\text{O}(l)$



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<sup>1</sup>Source credit: Magnus Rosendahl

<sup>2</sup>Source credit: Globalchange.gov. Figure updated from Karl et al. 2009, Global Climate Change Impacts in the United States