Use It! Don’t Lose It!

MATH

Daily Skills Practice

Grade 7

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Incentive Publications
Don’t let those math skills get lost or rusty!

As a teacher you work hard to teach math skills to your students. Your students work hard to master them. Do you worry that your students will forget the material as you move on to the next concept?

If so, here’s a plan for you and your students—one that will keep those skills sharp.

*Use It! Don’t Lose It!* provides daily math practice for all the basic skills. There are five math problems a day, every day for 36 weeks. The skills are correlated to national and state standards.

Students practice all the seventh-grade skills, concepts, and processes in a spiraling sequence. The plan starts with the simplest level of seventh-grade skills, progressing gradually to higher-level tasks, as it continually circles around and back to the the same skills at a little higher level, again and again. Each time a skill shows up, it has a new context—requiring students to dig into their memories, recall what they know, and apply it to another situation.

### The Weekly Plan—Five Problems a Day for 36 Weeks

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<th>Monday – whole numbers</th>
<th>Wednesday – integers</th>
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<td>one computation item</td>
<td>one problem-solving task (word problem)</td>
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<td>one algebra item</td>
<td>one geometry item</td>
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<table>
<thead>
<tr>
<th>Monday and Wednesday</th>
<th>one statistics or probability item</th>
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<table>
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<th>Tuesday and Thursday</th>
<th>one measurement item</th>
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<td>one number concepts item</td>
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<th>two computation items</th>
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<td>one algebra item</td>
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<td></td>
<td>one item rotating among math strands</td>
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<td>one <em>Challenge Problem</em> demanding more involved steps, thinking skills, and calculations (making use of several skills)</td>
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(all the details of what’s covered, where, and when)
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MONDAY WEEK 1 ________________________________________________ MATH PRACTICE

1. Compute: \[ 986 + 175 \]

2. Give the rule for the number sequence. Write the next three numbers.
   \[ 1, 3, 8, 19, 42, 89, \____, \____, \____\]

3. In a set of data, the sum of the data divided by the number of data items is the
   ○ range   ○ median
   ○ mean    ○ mode

4. Draw a pair of perpendicular lines.

5. Can this problem be solved with the information given?
   In 1933, a London circus offered a reward in the amount of 20,000 British pounds for the capture of the Loch Ness Monster. In 2005, a professor from Maine announced a $1 million reward for a photograph of the Loch Ness Monster, Bigfoot, or the Abominable Snowman that would lead to the capture of any one of the three legendary creatures. What is the difference between the amounts of the two rewards?

TUESDAY WEEK 1 ________________________________________________ MATH PRACTICE

1. Which statement is not true?
   a. A composite number can be divided by two.
   b. \(-2.5\) is an integer.
   c. A fraction is a rational number.
   d. An integer is a counting number.

2. Write this number in standard notation:
   sixty-six thousand, sixty-six

3. Compute: \[ 4.94 + 0.02 \]

4. Which units are metric units?
   ○ grams  ○ liters  ○ yards  ○ ounces
   ○ inches  ○ kilometers  ○ acres  ○ meters

5. What information is not needed to solve the problem?
   In the mountains of Nepal, some climbers found footprints at an altitude of 18,000 feet. The footprints measured 11 inches long and 5 inches wide. Other climbers claim that they saw a Yeti in the same area at 16,595 feet. What is the difference in the elevations at which the two sightings occurred?
1. What operation is needed to solve the problem?
Sailors insisted that the Kraken (a large sea creature) was 1,700 feet in diameter when its tentacles were outstretched. About what would the circumference of this creature be?

2. 
This angle is a(n) ______ angle.

3. What number is the opposite of –37?

4. Compute: \(-16 + 8 = \)

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5. Which three-month period had the most sightings of all three creatures?

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1. What is the absolute value of \(-135\)?

2. Compute: \(\frac{3}{8} + \frac{1}{8} + \frac{3}{8} = \)

3. Put these in order from least to greatest:
   - 2,022
   - 22
   - 220
   - 20,200
   - 2,202
   - 202

4. If an average of 1,135 visitors go to Scotland’s Loch Ness each month, how many people visit in one year?

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5. a. Measure the footprint in centimeters. (Round to the nearest centimeter.)
   b. If the scale of the drawing is 1 cm = 2 in, how big would the actual footprint be?
1. Compute: \((-16) - 20 = \) 

2. Compute: \(345 \times 27\) 

3. Which expression matches the words? 
   
   **twice the difference between twelve and a number**
   
   a. \(2n - 12\)
   b. \(2(12 - n)\)
   c. \(2(n - 12)\)
   d. \(2 \times 12 - n\)

4. Which event has the *least* likelihood of happening? 
   
   a. Evening will come today.
   b. You choose the name of a weekday and get a day beginning with T.
   c. A bubblegum machine has 100 green and 10 yellow gumballs. You put in a coin and get a yellow gumball.
   d. You flip a coin and it lands tails up.

5. **Challenge Problem**

Three friends liked to track down legendary creatures. The diagram shows some statistics on what they saw in a three-year period of searching.

a. Which friend had the most sightings?

b. Which friend saw only two of the three creatures (or footprints)?

c. Which creature (or prints) was seen the most times?
1. Estimate the solution.

The average thickness of the ice cap over the South Pole is the nine times the height of the Eiffel Tower. The Eiffel Tower is 1,052 feet tall. About how thick is the ice cap?

2. Which expression matches the words?

three times the square of a number (n)

a. \(3n^2\)   b. \(n^3\)   c. \(3 + n^2\)   d. \(3^2 + n\)

3. Compute:

\[
17,963
- \ 1,298
\]

4. The name of each month is written once on a slip of paper and put into a bag. Without looking, you choose one slip. What are the possible outcomes?

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5. Which angles are < 90°?

- A
- B
- C
- D
- E
- F
- G

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1. What is the value of the digit 6 in the number?

33,602,541

2. How many terms are in this expression?

34 + 2x - x

3. Compute:

5.2 \times 0.3 =

4. Which of these is the best unit for measuring the height of an iceberg?

- inches
- square centimeters
- meters
- kilometers
- millimeters
- square kilometers

5. What operations are needed to solve this problem?

Some 20 to 30 million tons of ice break off the Jakobshavn Glacier in Greenland every day, forming icebergs. Approximately how many pounds of icebergs break off from the glacier in an hour?