# Grade 6 Mathematics <br> Week of October 19 - October 22 

## Lesson 1.5: Number Strategies

## Lesson Materials

- Lessons for Section 1.5 Number Strategies
- Number Strategies Learning Guide (This PDF)

Use the link above to open the lessons for Section 1.5 Number Strategies. Remember: on the lesson page, use the arrow next to the "Table of Contents" at the top of the page to move through the lessons. You can also click on the Table of Contents to open the menu so you can jump to a specific lesson page.


Numbers are all around us. They serve very different purposes depending on how they are used. A number is a mathematical object used to count, measure or label.


Work through the online lessons. You can work at your own pace or follow the suggested schedule below. Complete the activities in your Learning Guide as you work through the lessons. You can print the Learning Guide, or, copy out the questions on a separate piece of paper. Be sure to try the games and practice quizzes as you make your way through the online lesson book.

## Suggested Lesson Schedule

| Monday | Wednesday |
| :---: | :---: |
| - Mental Math | - Word Problems |
| - Multiplication | - Math Terms |
| - Multiplication Challenge | - Practice Terms |
| - Practice Your Math | - Arrange Steps |
| - Halving and Doubling | - LG \#7-8, p. 16-17 |
| - Add in Your Head | Thursday |
| - Speed Practice <br> - LG 1.5 \#1-2, p. 15 | Thursday <br> - Word Problem Example 1 |
|  | - Word Problem Example 2 |
| Tuesday | - Practice \#1 |
| - Add 3-Digit | - Word Problem Example 3 |
| - More 3-Digit | - Practice 2 |
| - Speed Practice | - Word Problem Example 4 |
| - Subtraction (2-digit) | - Practice \#3 |
| - Speed Practice | - LG \#9 p. 17 |
| - LG \#3-6, p. 15-16 |  |

### 1.5 Number Strategies

1. Work out the answers in your head using the appropriate doubling strategy
a. $18 \times 4=$ $\qquad$
b. $16 \times 4=$ $\qquad$
c. $26 \times 4=$ $\qquad$
d. $24 \times 8=$ $\qquad$
e. $15 \times 8=$ $\qquad$
f. $22 \times 8=$. $\qquad$
2. Use the mental math strategy of compensation (for example: $+1 /-1$, or $+2 /-2$ ) to add the following numbers. Write down how you would change the numbers in your head for each question.
Ex. $27+51=$ $\qquad$ $=\quad 76$
d. $79+14=$ $\qquad$ $=$ $\qquad$
Ex. $18+36=$ $\qquad$ $=\quad 54$
e. $46+31=$ $\qquad$ $=$ $\qquad$
a. $41+16=$ $\qquad$ $=$ $\qquad$
f. $58+23=$ $\qquad$ $=$ $\qquad$
b. $53+22=$ $\qquad$ $=$ $\qquad$
c. $19+24=$ $\qquad$ $=$ $\qquad$
3. Use the mental math strategy of expanding (splitting into place values) to add the following numbers. Write down how you would change the numbers in your head for each question.
Ex. $53+28=$

$$
\begin{aligned}
& 50+3 \\
& \frac{20+8}{70+11}=81
\end{aligned}
$$

c. $14+43=$
a. $19+24=$
b. $63+26=$
d. $38+48=$
e. $57+33=$
4. Use the mental math strategy of expanding (splitting into place values) to add the following numbers. Write down how you would change the numbers in your head for each question.
a. $147+312$
c. $655+343$
b. $531+436$
d. $238+51$
5. Use the mental math strategy of compensation to add the following numbers. Write down how you would change the numbers in your head for each question.
a. $580+355$
c. $490+461$
b. $174+620$
d. $378+210$
6. Use the mental math strategy of your choice to subtract the following numbers. Write down how you would change the numbers in your head for each question.
a. 65-23
d. 72-36
b. 89-72
e. 92-65
c. 58-24
f. 45-26
7. List at least three specific tips from the Strategy for Solving Word Problems video that you will use when you solve word problems.
8. Match the math terms with the correct math operation.
$-\quad \div$
a. triple the ingredients
$\qquad$ b. 3 cm longer

| $\div 2$ | c. combined total of animals |
| :---: | :---: |
| $\times$ | d. the average grade |
| + 3 | e. half the speed |
| $\times 3$ | f. the product of the length and the height |
| + | g. 3 fewer points than |
| $\div 3$ | $h$. the difference in weight |
| - 3 | i. split between 3 friends |

9. Show all of the problem solving steps that you use to solve the following words problems.
a. Three friends earned $\$ 360$ mowing lawns over two days. They decide to split the earnings evenly. How much does each person receive?
b. Palvinder is 174 cm tall and is in Grade 9 . Kyra is 143 cm tall and is in Grade 6. What is the difference in height between the two?
c. Rowan ran 8 km on Saturday. Deeksha ran double that distance, but needed to pause 4 times during her run. How far did Deeksha run?
d. Antonio pays $\$ 8.99$ per month for a subscription to a music streaming service. The rate will be increasing by $\$ 1.50$ per month in 2 months. What will the new subscription fee be?
e. Wei has prepared a playlist of 46 songs for the school dance. The dance starts at 7 pm and the principal said that there is only enough time to play 27 songs. How many songs will Wei have to remove from his playlist?
f. Throughout the summer vacation, Cheyenne read 5 Big Nate books, all 3 books in the Divergent trilogy, the first 2 Harry Potter books as well as the book The Giver. How many books did she read in total during the summer?
g. Mr. Dalworth bought a pack of 72 fancy pencils to give to his students. There are 24 students in his class. If Mr. Dalworth splits the pencils evenly between all of the students, how many pencils will each student get?
h. At Jin's school, students on the volleyball team practice for 4 hours every week. The volleyball season is 9 weeks long. How many hours of volleyball practice will the team have done by the end of the season?
