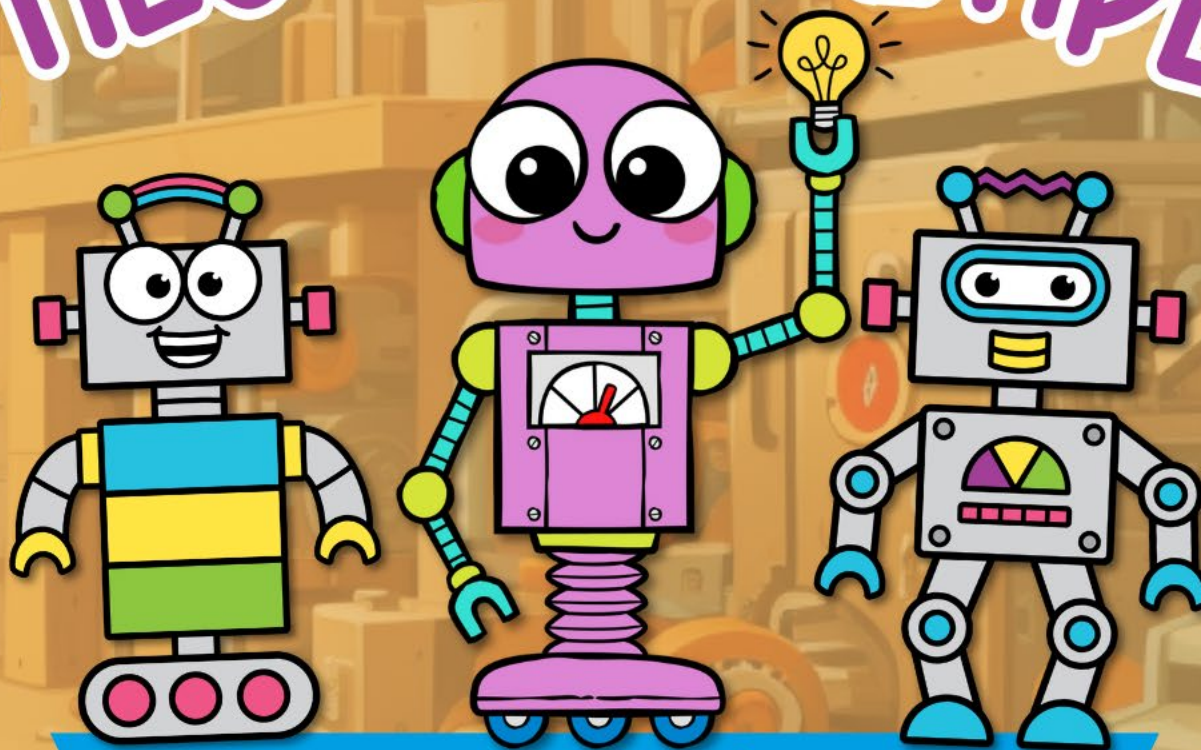




3rd Grade

PROPERTIES OF MULTIPLICATION



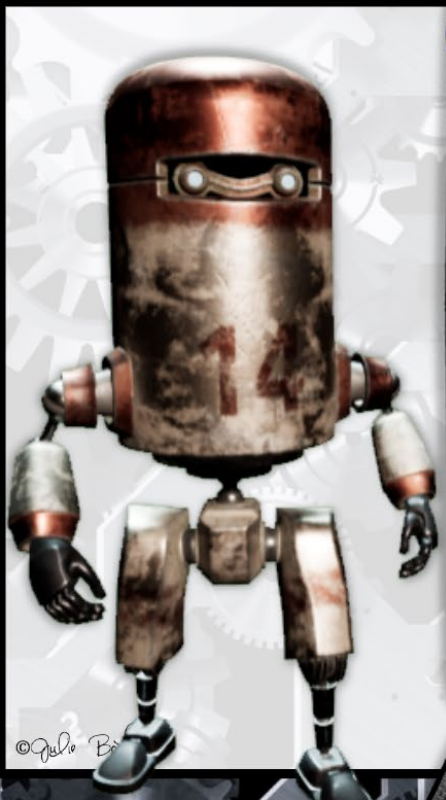
UP TO FOUR NUMBERS

ROBOT ESCAPE ROOM

PRINTABLE • GOOGLE • WEBSCAPE™

Help the Robot Factory!

Students won't realize they are practicing Multiplication up to 4 numbers skills! They will be immersed in the storytelling and our original videos as they complete math challenges.



DEAR

YOU FOUND THE ROBOT FACTORY! TO GET THIS PLACE UP AND RUNNING AGAIN, YOU'LL HAVE TO LEND ME A HAND! HELP ME GRAB MY MISSING PARTS, AND I'LL BE FULLY OPERATIONAL AGAIN!

FIND THE FOLLOWING MISSING PARTS:

1. GET MY LEFT ARM FROM THE VENDING MACHINE.
2. GET MY RIGHT ARM FROM UPSTAIRS.
3. GET MY LEGS FROM UNDER THE FORKLIFT.
4. GET MY FOOT FROM THE TRAIN.

BRING EACH MISSING PART BACK TO ME IN THE FACTORY.

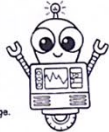
Learn more!



4 Mathematics Challenges

Challenge #1

- Solve each "add 4 numbers" problem.
- Record answers on your brochure.
- Check your answers in the Robot Decoder.
- Add the robot arm to the factory.
- Scan the QR code in the corner of this page.
- Move on to the challenge #2.



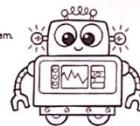
Scan the QR code or click [here](#) to view the video.



1.
$$\begin{array}{r} 27 \\ 34 \\ 15 \\ + 44 \\ \hline \end{array}$$
- a. 100
b. 129
c. 110
d. 120
2.
$$\begin{array}{r} 32 \\ 51 \\ 28 \\ + 36 \\ \hline \end{array}$$
- a. 154
b. 163
c. 165
d. 153
3.
$$\begin{array}{r} 14 \\ 58 \\ 26 \\ + 35 \\ \hline \end{array}$$
- a. 154
b. 163
c. 165
d. 153
4.
$$\begin{array}{r} 56 \\ 28 \\ 12 \\ + 43 \\ \hline \end{array}$$
- a. 139
5.
$$\begin{array}{r} 72 \\ 48 \\ 41 \\ + 34 \\ \hline \end{array}$$
- a. 195
b. 185
c. 189
d. 193
6.
$$\begin{array}{r} 43 \\ 67 \\ 26 \\ + 32 \\ \hline \end{array}$$

Challenge #2

- Solve each "subtract 3-digit numbers" problem.
- Record answers on your brochure.
- Check your answers in the Robot Decoder.
- Add the other robot arm to the factory.
- Scan the QR code in the corner of this page.
- Move on to the challenge #3.



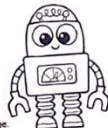
Scan the QR code or click [here](#) to view the video.



1.
$$\begin{array}{r} 562 \\ - 241 \\ \hline \end{array}$$
- a. 803
b. 321
c. 221
d. 301
3.
$$\begin{array}{r} 452 \\ - 249 \\ \hline \end{array}$$
- a. 207
b. 203
c. 211
d. 213
5.
$$\begin{array}{r} 324 \\ - 196 \\ \hline \end{array}$$
- a. 122
b. 128
c. 228
d. 272
4.
$$\begin{array}{r} 767 \\ - 158 \\ \hline \end{array}$$
- a. 609
b. 619
c. 611
d. 601
6.
$$\begin{array}{r} 512 \\ - 345 \\ \hline \end{array}$$
- a. 267
b. 137
c. 167
d. 133

Challenge #3

- Solve each "find the mistake" problem.
- Record answers on your brochure.
- Check your answers in the Robot Decoder.
- Add the robot legs to the factory.
- Scan the QR code in the corner of the next page.
- Move on to the challenge #4.



1. What mistake did the student make when adding the numbers?
- $$\begin{array}{r} 56 + 59 + 31 + 63 = 219 \\ \begin{array}{r} 50 + 6 \\ 50 + 9 \\ 30 + 1 \\ + 60 + 3 \\ \hline 200 + 19 = 219 \end{array} \end{array}$$
- a. The student added an extra 10 when adding the tens together.
b. The student added $6 + 9 + 1 + 3$ incorrectly.
c. The student added $200 + 19$ incorrectly.
d. The student forgot to regroup the 10 when adding the numbers in the one's place.

What mistake did the student make when subtracting the numbers?

$$\begin{array}{r} 97 - 49 - 11 - 23 = 14 \\ \begin{array}{r} 80 \quad 17 \\ 90 + 7 \\ 40 + 9 \\ 10 + 1 \\ - 20 + 3 \\ \hline 10 + 4 = 14 \end{array} \end{array}$$

- a. The student subtracted the tens place incorrectly.
b. The student forgot to ungroup a ten from the tens place.
c. The student subtracted the ones place incorrectly.
d. The student did not make a mistake.

3. What mistake did the student make when adding the place value blocks?

| Hundreds | Tens | Ones |
|----------|------|------|
| | | |
| 5 | 2 | 9 |

- a. The student added the ones incorrectly.
b. The student forgot to add an extra hundred after they regrouped the tens.
c. The student forgot to add an extra ten after they regrouped the ones.
d. The student added the hundreds incorrectly.

- Challenges focused on Properties of Multiplication up to 4 Numbers
- Each challenge takes about 20-30 minutes

Learn more!



4 Mathematics Challenges

- Themed videos integrated throughout the Escape Room to keep kids engaged.
- Students work in groups, partners, or independently.

Learn more!



4. What mistake did the student make when adding the place value blocks?

| Hundreds | Tens | Ones |
|----------|------|------|
| 7 | 9 | 4 |

- The student added the tens incorrectly.
- The student counted an extra one that wasn't there.
- The student added the hundreds incorrectly.
- The student forgot to add an extra ten after they regrouped the ones.

5. What mistake did the student make when adding the numbers?

$$\begin{array}{r} 477 \\ + 282 \\ \hline 659 \end{array}$$

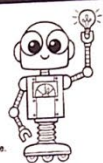
- The student added $7 + 2$ incorrectly.
- The student forgot to add the hundred they regrouped after adding $7 + 8$.
- The student added $4 + 2$ incorrectly.
- The student forgot to regroup a one to the tens place after adding $7 + 2$.

6. What mistake did the student make when subtracting the numbers?

$$\begin{array}{r} 212 \\ 832 \\ - 458 \\ \hline 434 \end{array}$$

- The student subtracted $12 - 8$ incorrectly.
- The student forgot to ungroup a ten from the three when subtracting $2 - 8$.
- The student forgot to ungroup a hundred eight when subtracting $8 - 4$ incorrectly.

Challenge #4



- Solve each word problem.
- Record answers on your brochure.
- Check your answers in the Robot Decoder.
- Add the robot foot to the factory.
- Scan the QR code at the bottom of the next page.
- Build the robot and reset the patrol bot!

1. Rosalie wrote a song that was 564 words long. Erin wrote a song that was 497 words long. How much longer is Rosalie's song than Erin's?

Show Your Work

- 33 words
- 167 words
- 67 words
- 57 words

2. The band has \$296 saved for equipment. Amad needs a new guitar and a new microphone. The guitar costs \$182. The microphone costs \$128. Does he have enough money to pay for both items?

Show Your Work

- Yes, he has enough money, and some left over.
- Yes, he has exactly enough money for both items.
- No, he doesn't have enough money for either item.
- No, he only has enough money for one of the items.

3. Lucetta needs to buy two tickets for her parents to attend Battle of the Bands and one food package for them. If the tickets cost \$47 each and the food package costs \$35, how much money will she spend on the two tickets and one food package?

Show Your Work

- \$119
- \$82
- \$129
- \$109

4. The band manager is tracking attendance. At the first show, 289 guests attended. At the second show, 406 guests attended. How many guests attended both shows combined?

Show Your Work

- 695 guests
- 685 guests
- 595 guests
- 696 guests

5. Every band competing in the Battle of the Bands must sell 300 tickets. If you sold 136, and Lucetta sold 98, how many does Amad have to sell so the band sells all 300 tickets?

Show Your Work

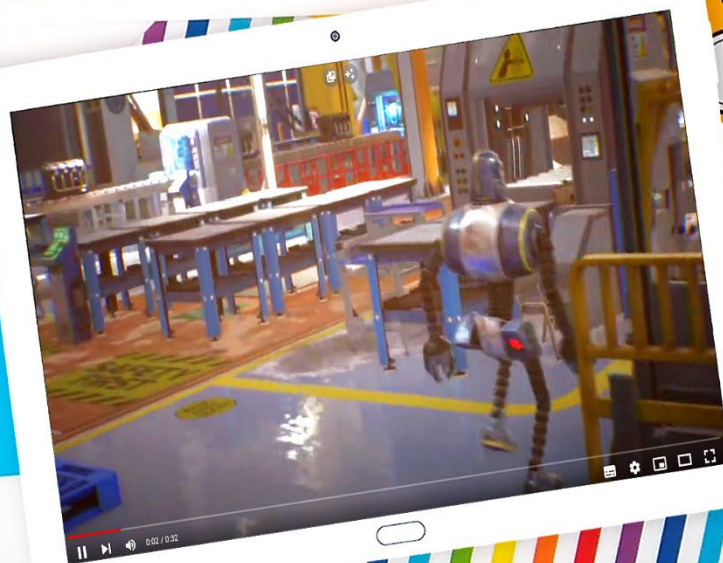
- 134 tickets
- 56 tickets
- 176 tickets
- 66 tickets

6. The concert venue has 950 seats. If 262 seats are empty, and all the other seats are filled with fans, how many fans attended the concert?

Show Your Work

- 712 fans
- 688 fans
- 692 fans
- 682 fans

Scan the QR code or click [here](#) to view the video.



3 Versions

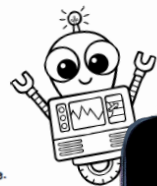
- Print
- Google Slides
- Webscape™ (Our most popular experience)

Learn more!



Challenge #1

1. Solve each "properties of multiplication" problem.
2. Record answers in your brochure.
3. Check your answers in the Robot Decoder.
4. Add the robot arm to the factory.
5. Scan the QR code in the corner of the next page.
6. Move on to the challenge #2.



1. Find the repeated addition:
6 groups of 5

- a. $6+6+6+6+6+6$
- b. $5+5+5+5+5$
- c. $6+6+6+6+6$
- d. $5+5+5+5+5+5$

2. Find the repeated addition:
7 groups of 4

- a. $4+4+4+4+4+4+4$
- b. $7+7+7+7+7+7+7$
- c. $4+4+4+4+4+4+4$
- d. $7+7+7+7+7+7+7$

1. Find the Repeated Addition.

1. 6 groups of 5

- a. $6+6+6+6+6+6$
- b. $5+5+5+5+5$
- c. $6+6+6+6+6$
- d. $5+5+5+5+5+5$

Show your Work

3. 4 groups of 8

- a. $8+8+8+8+8+8+8+8$
- b. $8+8+8+8$
- c. $4+4+4+4$
- d. $4+4+4+4+4+4+4+4$

Show your Work



1 Find the Repeated Addition

6 groups of 5




$$\begin{array}{c} 6+6+6+6+ \\ 6+6 \end{array}$$

$$\begin{array}{c} 5+5+5+5+ \\ 5 \end{array}$$

$$\begin{array}{c} 6+6+6+6+ \\ 6 \end{array}$$

$$\begin{array}{c} 5+5+5+5+ \\ 5+5 \end{array}$$

©Julie Barker

| | PDF  | Google Slides  | Webscape™  |
|------------------------|---|---|---|
| Format Type | Printable | Digital | Digital |
| Device | N/A | Any Device | Any Device |
| Required Prep | Print & Go | Copy & Share | Zero Prep |
| Student Answers | Printable Answer Pamphlet | Google Sheets Decoder Tool | Integrated Challenge Hub |
| Self Correcting | Includes Answer Key | Self Correcting | Self Correcting |
| Custom Videos | QR Codes | Embedded You Tube | Embedded |
| Audio Readings | N/A | No Audio Readings | Contains Audio Readings |
| Navigation | N/A | Student Directed | Automatically Advancing |
| Extras | Early Finish Challenges | Movable Pieces | Interactive Animation |

3 Versions

- Print
- Google Slides
- Webscape™ (Our most popular experience)

Learn more!



Print

- Cut and paste stamps for each challenge
- Easy to follow
- Optimal for group or partner work
- Recording brochure for answers
- Self-checking decoder
- Certificate of completion

Learn more!



Print

- Certification

Learn more!



Robot Escape Room

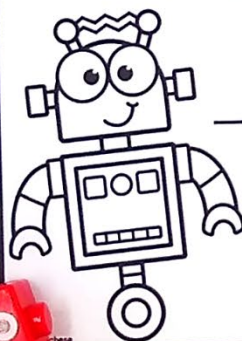
Olivia Davis

(name)

has successfully completed the challenges and
reset the patrol bots!

30/04

(date)



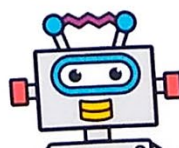
The Robot

Scan the QR code
or click [here](#) to
view the video.

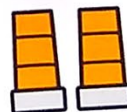


ROBOT RECORDING BROCHURE

Record your
challenge answers
along your journey.



CHALLENGE 3



| | Answer | Code |
|----|--------|--------|
| 1. | g | I |
| 2. | d | lifted |
| 3. | | |
| 4. | | |
| 5. | | |
| 6. | | |

How did you get the legs?

Webscape TM

- Most interactive experience
- Self correcting
- Embedded videos
- Embedded audio
- Animation
- Simple navigation

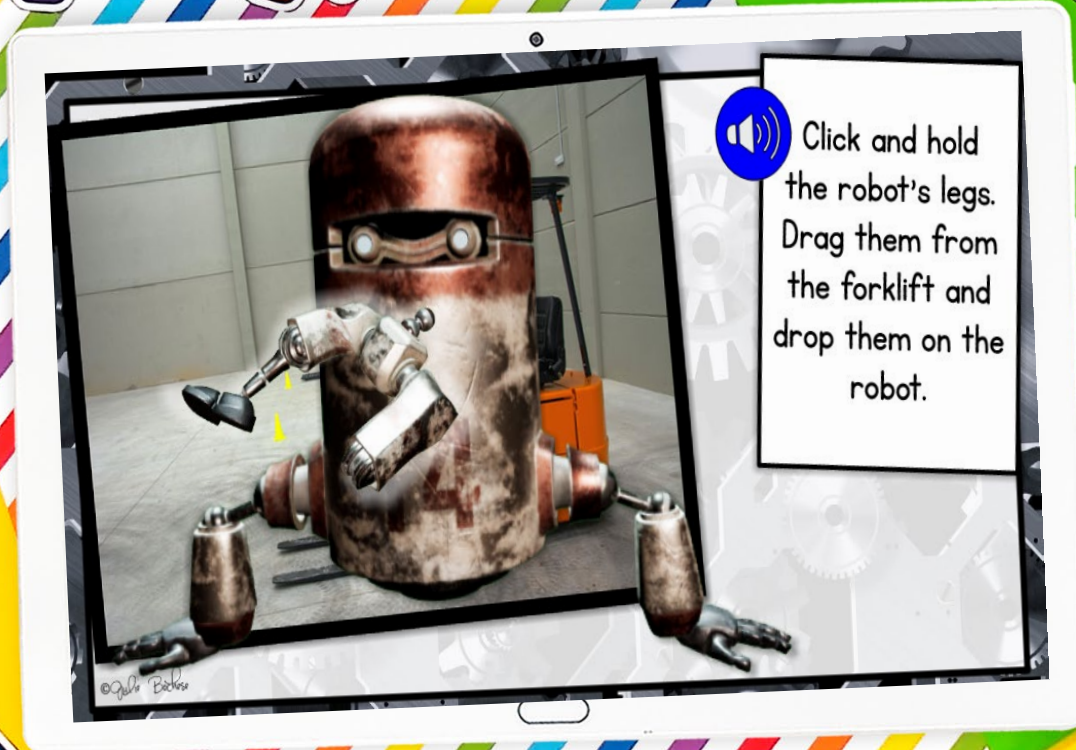
Learn more!



Webscape TM

- No log ins or sign ups
- Works with any device that has an internet connection and web browser
- Zero prep! Just share the link with your students.

Learn more!



Google Slides

- Two to four problems per slide
- Students drag to circle their answers

Learn more!



2. Find the Mistake.

3. What mistake did the student make when using the distributive property to multiply? Solve. ☐

$8 \times 8 = ?$

Student's work:
First, break one 8 into 4 and 4,
then multiply $8 \times 4 = 36$ and $8 \times 4 = 36$.
Last, add $36 + 36 = 72$.

a. The student broke 8 apart incorrectly.
b. The student added $36 + 36$ incorrectly.
c. The student thought $8 \times 4 = 36$, but it equals 32, and $32 + 32 = 64$.
d. The student used too many 8s as factors.

4. What mistake did the student make when using the distributive property to multiply? Solve. ☐

$12 \times 7 = ?$

Student's work:
First, break 12 into 10 and 2,
then multiply $10 \times 7 = 70$ and $2 \times 7 = 14$.
Last, add $70 + 14 = 94$.

a. The student added $70 + 14$ incorrectly.
b. The student thought 10×7 was 70 when it is really 100.
c. The student broke the 12 apart incorrectly.
d. The student used 12 as a factor after breaking it into 10 and 2.

Google Slides

- Toggle to self-checking decoder
- Decoder will prompt at the end of each challenge whether students are correct or need to check their work.


Learn more!



Looking for More?

ESCAPE ROOM BUNDLE Math Skills

3rd Grade



Math Escape Rooms

2nd Grade 3rd Grade 4th Grade 5th Grade

Telling Time: Time Machine Escape Room


ENGAGE VIDEO: TELL THE STORY

Print and Digital

MATH: Categorize Shapes

Catch the Bandit Escape Room

3rd Grade



Dear Student,

You're having a great time visiting the big city! But while you're out seeing the sites, petty crime caught up with you. A bandit took some money out of your backpack.

You must follow the bandit to catch him and get your money back.

1. Go to the waterfront.
2. Go to Chinatown.
3. Go to the park.
4. Go to Downtown.

After each challenge, add the pin to your map to catch the bandit.


Sincerely,
Friendly Neighborhood Crime Watchers

Print and Digital

Magi CORE

HALLOWEEN MATH Escape Room

3rd GRADE



Place Value

Mrs. P... gave out different types of candy to the trick-or-treaters. The table shows how many of each type of candy she gave out.

| Candy Type | Chocolates | Lollipops | Gummies | Candy Corn |
|------------|------------|-----------|---------|------------|
| Amount | 245 | 334 | 286 | 422 |

When rounded to the nearest hundred, which two candy types did she give out the same amount of?

- a. Chocolates & gummies
- b. Chocolates & candy corn
- c. Lollipops & gummies
- d. Lollipops & candy corn

Magi CORE