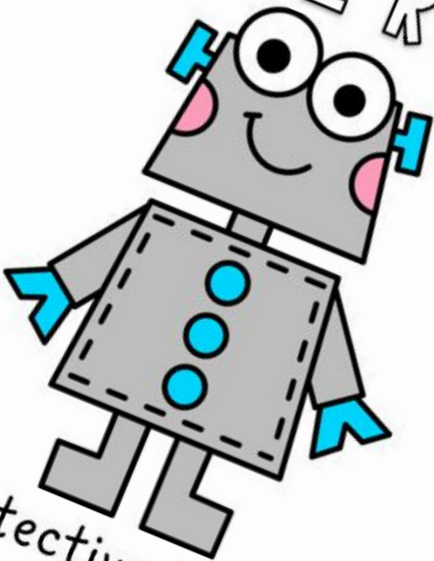


Math Mystery

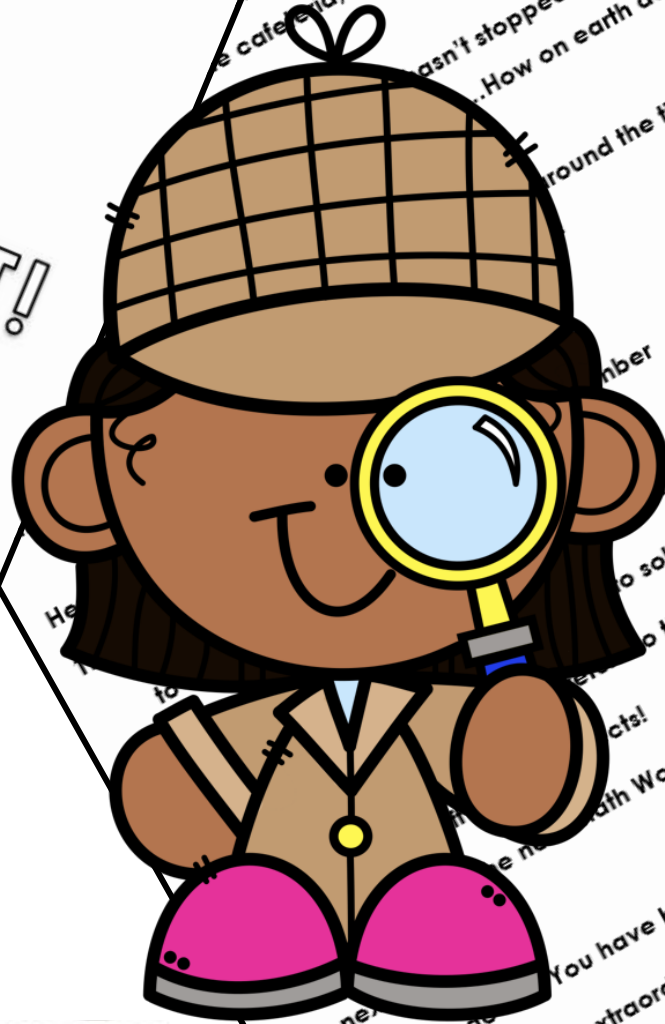
MISSING SCHOOL

ROBOT!

MYSTERY
OF THE
MISSING
SCHOOL ROBOT!

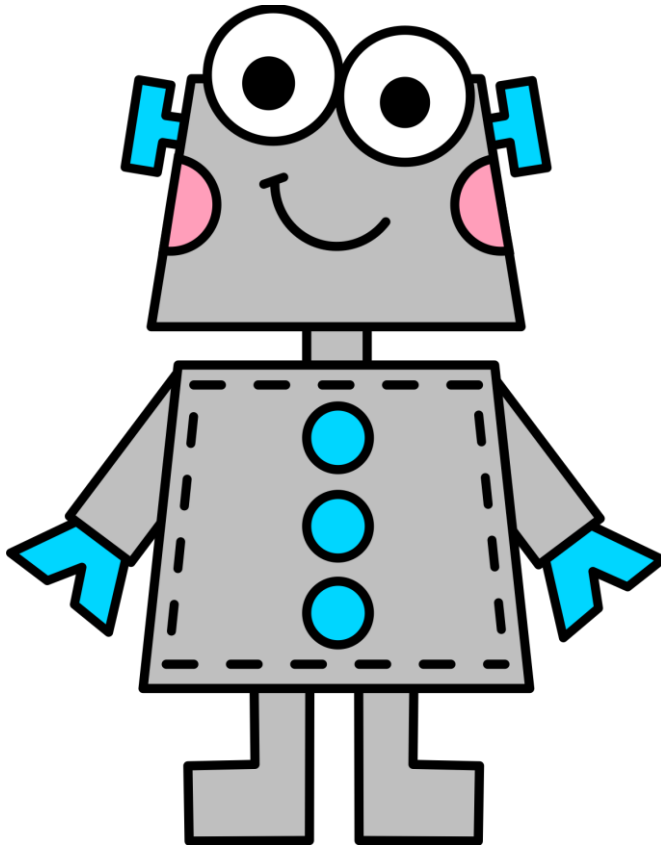


Detective Name: _____



... WAS STRUCK AT
... ELEMENTARY!
... Robot is missing! Robbie Robot
... cafe, helps in the classrooms and
... can't stopped crying si
... How on earth do
... round the
... member
... to sol
... s t
... acts!
... math Wo
... the m
... You have
... extraor

MYSTERY OF THE MISSING SCHOOL ROBOT!



Detective Name:



DISASTER HAS STRUCK PEACHBERRY ELEMENTARY!

Oh no, the school's much-loved Robbie Robot is missing! Robbie Robot helps out in the office, cooks in the cafeteria, helps in the classrooms and his disappearance is a DISASTER!

Everyone is so incredibly sad! Teachers can't teach, kids can't learn ...How on earth does a robot just disappear?

There are 10 people who saw Robbie Robot last around the time he went missing. These 10 people are considered SUSPECTS!

Here is your detective brief:

1. Complete each math worksheet and remember to check your answers carefully.
2. At the end of each activity, you will be given a clue that will draw you closer and closer to solving this mystery!
3. Each time you crack a clue, return to the 'Top 10 Suspects Sheet' to cross off or tick suspects!
4. Then complete the next Math Worksheet for your next clue.
5. You can do this! You have been assigned Chief Detective because of your extraordinary problem-solving skills.

Good luck!



'TOP 10 SUSPECT SHEET!'

Directions: Use this sheet to cross off suspects as you crack the code on each worksheet.

Suspects	Places	Reason
1. Mr Frazzlebone Principal	Principal's Office	Drawing up plans for a new school playground
2. Mr Pickles Janitor	School Corridor	Polishing Robbie's metal body and his 96 buttons
3. Mr Potts Librarian	Library	Helping librarian unpack 231 books from boxes
4. Mrs Zany Scientist	Science Lab	Mixing liquids for a science experiment
5. Grade 5 kids	School Field	Playing baseball at 10.55am
6. Mrs Howard Secretary	Front Office	Replacing A4 paper in the photocopier
7. Mrs Petal Cafeteria Manager	Kitchen	Stock-taking in the cafeteria
8. Mr Jessup Gardener	In garden shed	Sorting 210 pots
9. Mr Mac Grade 7 Teacher	Grade 7 classroom	Rearranging desks and chairs in the classroom
10. The Parents	Front of school at drop-off time	Having a morning chat

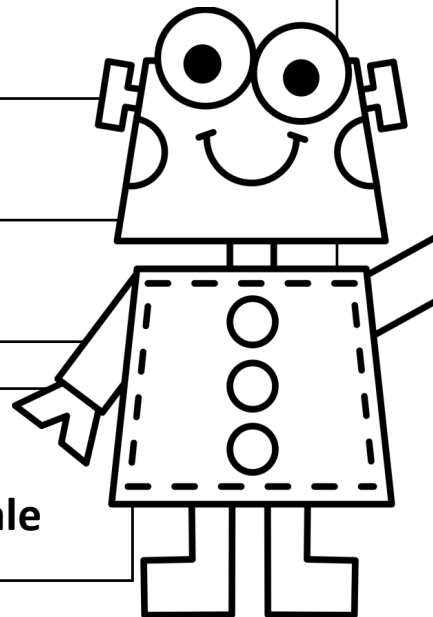
PLACE VALUE CLUE # 1

Directions: Check the following sums and then write true or false:

Place Value	True or False
$200 + 50 + 5 = 255$	
$600 + 30 + 2 = 602$	
$500 + 70 + 0 = 570$	
$700 + 60 + 0 = 760$	
$900 + 90 + 9 = 999$	
$3000 + 200 + 40 + 7 = 3247$	
$6000 + 0 + 90 + 8 = 6008$	
$1000 + 900 + 20 = 1920$	
$2000 + 0 + 80 + 1 = 2018$	
$5000 + 700 + 50 + 7 = 5757$	

Clue

More true answers: Suspect is a male
More false answers: Suspect is a female



ORDERING NUMBERS

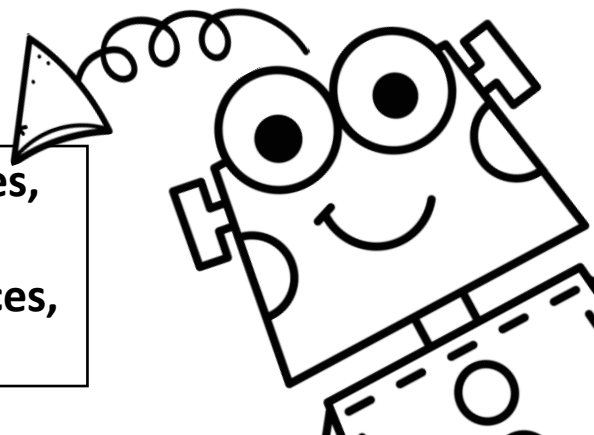
CLUE #2

Directions: Order these numbers from smallest to largest

Numbers	Smallest to Largest
4524, 5486, 3928	
1928, 9382, 5844	
2036, 6048, 1124	
3046, 4058, 2914	
6754, 2398, 7696	
5563, 4253, 8901	
9038, 2678, 4930	
4400, 3006, 1202	
6482, 6094, 4996	
1554, 8938, 3920	

Your next clue:

If there are more odd number sequences,
then eliminate all the indoor places.
If there are more even number sequences,
then eliminate all the outdoor places.



NUMBER PATTERNS CLUE #3

Directions: Complete the following number patterns:

1417	1427	1437		
------	------	------	--	--

2325	2345		2385	
------	------	--	------	--

8117	8217	8317		
------	------	------	--	--

7584		7784		7984
------	--	------	--	------

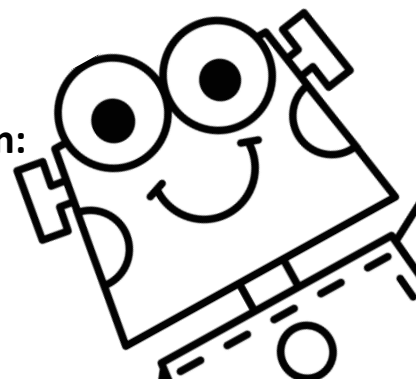
3189		3589	3789	
------	--	------	------	--

2256		4256	5256	
------	--	------	------	--

Here's your 3rd clue:

Tick which skip counting pattern occurs the most often:

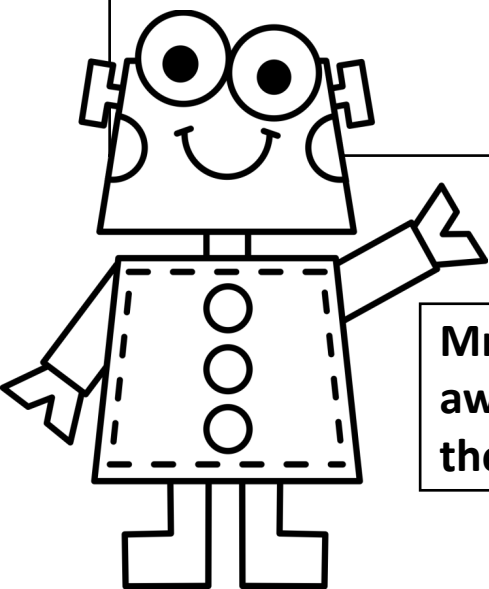
- 10s: It's not Mr Frazzlebone
- 20s: It's not Mrs Potts
- 100s: It's not the Mrs Zany



WORD PROBLEMS CLUE #4

Directions: Solve the following word problems:

<p>Jack has 324 marbles. His brother has double that amount. How many marbles does his brother have?</p>	<p>Jen has 546 gems. Sam has 342 gems. How many gems do they have in total?</p>	<p>In an aviary, there are 110 blue birds and 321 green birds. How many birds in all?</p>
<p>There are 289 buzzing bees inside a hive and 145 bees outside the hive. How many bees in total?</p>	<p>If there are 672 pencils in one box, how many pencils are there in 2 boxes?</p>	<p>In the garden, there are 935 red flowers and 412 yellow flowers. How many flowers altogether?</p>



4th clue:

Mr Mac got the date wrong! He was actually away the day Robbie Robot went missing, therefore he is no longer a suspect...Phew!

MENTAL MATH CLUE #5

Directions: Solve and write your answers in the boxes below:

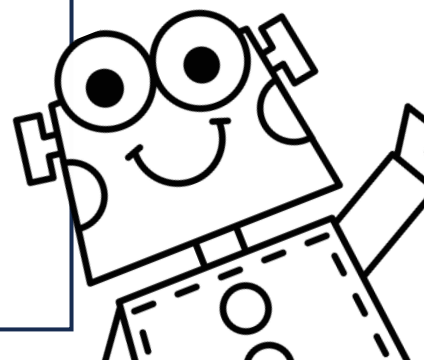
Mental Math	Write your answers
1 dozen	
6 groups of 10	
12 x 8	
250 + 250 + 250 =	
Half of 192	
How many days in a leap year?	
375 add 15	

Great job...You're halfway there!

This two-digit answer appears twice! Is it:

- 750
- 96
- 390

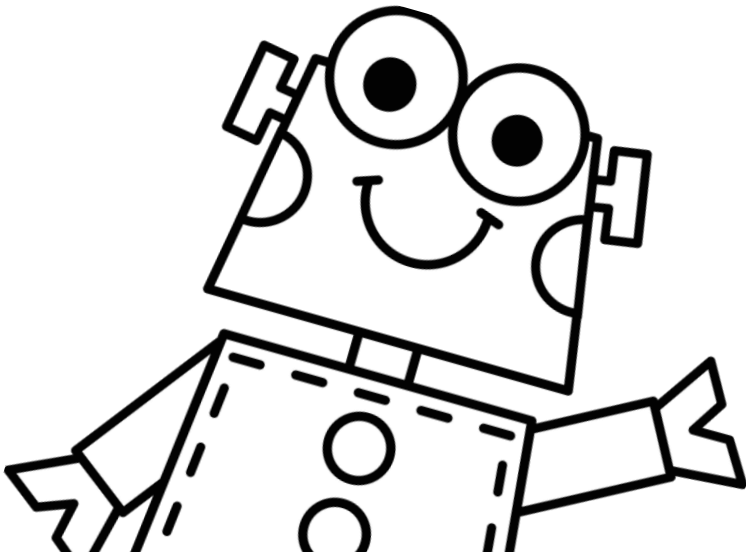
Go to the 'Top 10 Suspect Sheet' to locate this number and eliminate that suspect!



3D SHAPE CLUE #6

Directions: Draw a line to match the 3D shape to its description

cube	I have 8 sides
hexagon	A solid shape with no edges
octagon	I have 6 faces
sphere	I have 2 bases and no straight edges
cylinder	I have 5 sides



Clue 6:

Count how many 3D shapes are listed on this page. Then eliminate that number suspect!

MULTIPLICATION CLUE #7

Directions: Solve the following multiplication products:

$$\begin{array}{r} 45 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ \times 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 86 \\ \times 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 77 \\ \times 3 \\ \hline \\ \hline \end{array}$$

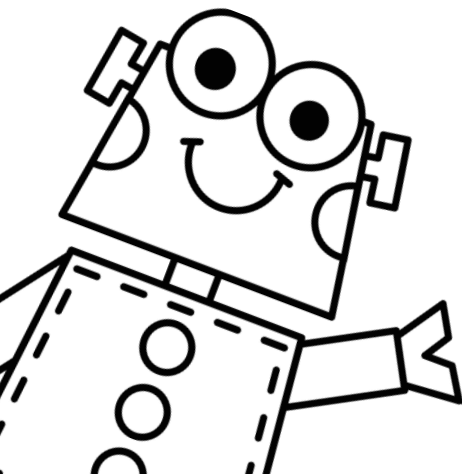
$$\begin{array}{r} 84 \\ \times 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 90 \\ \times 2 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 55 \\ \times 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 29 \\ \times 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 68 \\ \times 6 \\ \hline \\ \hline \end{array}$$



Clue 7:

For your next clue, you are looking for:

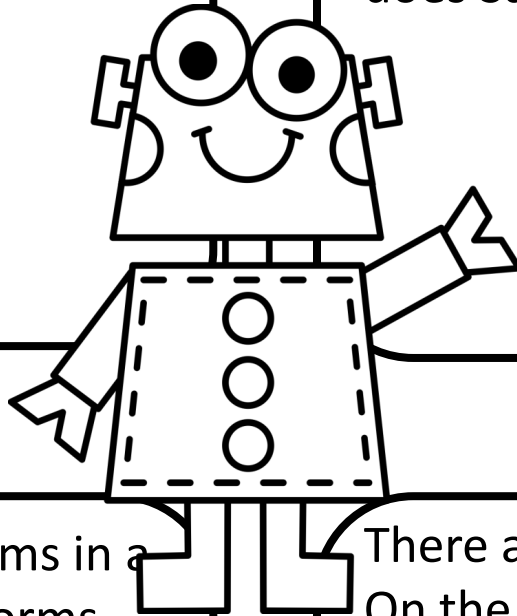
- A three-digit number
- An odd number greater than 200
- Once you find it, go to the 'Top 10 Suspects Sheet'
- Find the number and eliminate this suspect!

MATH STORIES CLUE #8

Directions: Solve the following and write your answers in the boxes:

There were 455 birds in a tree. 53 flew away. How many birds left?

Sam has 347 marbles. He gives 237 to Tom. How many marbles does Sam have now?



There 178 worms in a garden. 130 worms wriggle away. How many worms left?

There are 629 leaves On the ground. The wind blows 419. How many leaves on the ground now?

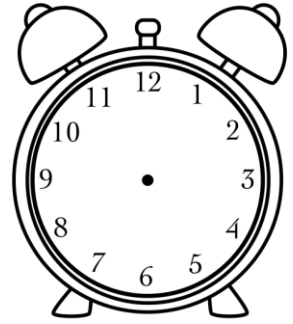
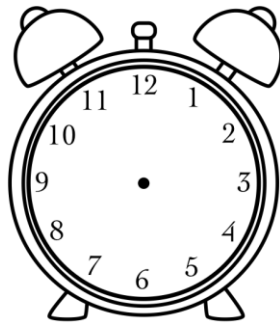
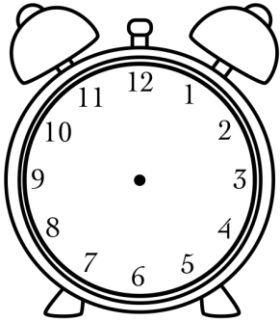
Circle this answer!

Clue:

- The number is between 200 and 220!
- Find this number on the Suspicious Suspects page and confidently eliminate that suspect!

TELLING THE TIME CLUE #9

Directions: Draw the hands on the clock to match the digital times:



12:34

7:07

10:55



9:14

3:23

8:25



4:18

1:39

6:29

Circle the third clock in the first row. Next, find this time on the 'Top 10 Suspicious Suspect Sheet.' Then eliminate this suspect!

COMPARING NUMBERS

CLUE # 10

Directions: Use the $>$, $<$ or $=$ to compare the following numbers:

345

873

987

746

918

657

493

576

120

120

379

654

573

753

731

936

Once you find the suspect, crack this code by unjumbling the letters to find out why Robbie Robot was taken:

 e H d n e d e e
 |
g r e h c r a i g n

TEACHER ANSWERS

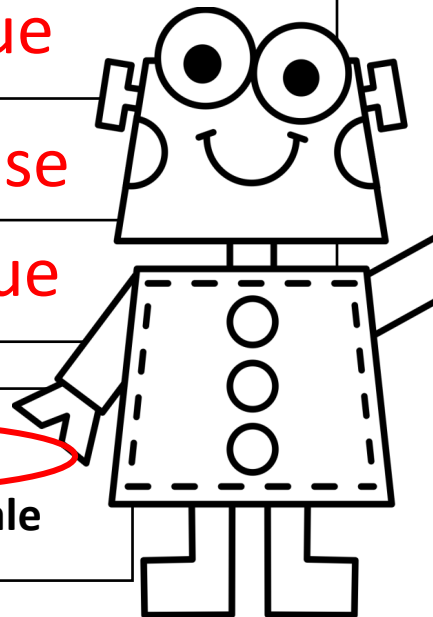
PLACE VALUE CLUE # 1

Directions: Check the following sums and then write true or false:

Place Value	True or False
$200 + 50 + 5 = 255$	true
$600 + 30 + 2 = 602$	false
$500 + 70 + 0 = 570$	true
$700 + 60 + 0 = 760$	true
$900 + 90 + 9 = 999$	true
$3000 + 200 + 40 + 7 = 3247$	true
$6000 + 0 + 90 + 8 = 6008$	false
$1000 + 900 + 20 = 1920$	true
$2000 + 0 + 80 + 1 = 2018$	false
$5000 + 700 + 50 + 7 = 5757$	true

Clue

More true answers: Suspect is a male
More false answers: Suspect is a female



ORDERING NUMBERS

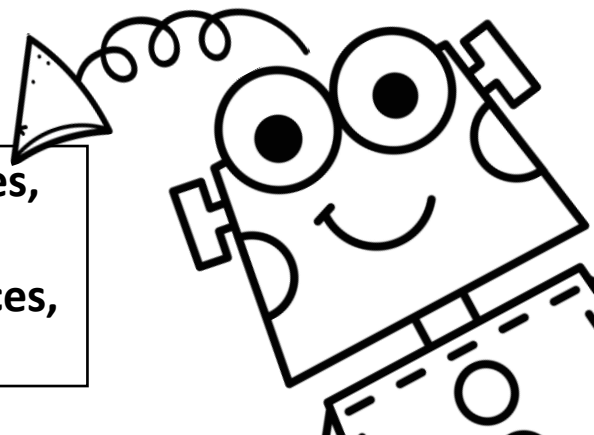
CLUE #2

Directions: Order these numbers from smallest to largest

Numbers	Smallest to Largest
4524, 5486, 3928	3928, 4524, 5486
1928, 9382, 5844	1928, 5844, 9382
2036, 6048, 1124	1124, 2036, 6048
3046, 4058, 2914	2914, 3046, 4058
6754, 2398, 7696	2398, 6754, 7696
5563, 4253, 8901	4253, 5563, 8901
9038, 2678, 4930	2678, 4930, 9038
4400, 3006, 1202	1202, 3006, 4400
6482, 6094, 4996	4996, 6094, 6482
1554, 8938, 3920	1554, 3920, 8938

Your next clue:

If there are more odd number sequences,
then eliminate all the indoor places.
If there are more even number sequences,
then eliminate all the outdoor places.



NUMBER PATTERNS CLUE #3

Directions: Complete the following number patterns:

1417	1427	1437	1447	1457
------	------	------	------	------

2325	2345	2365	2385	2405
------	------	------	------	------

8117	8217	8317	8417	8517
------	------	------	------	------

7584	7684	7784	7884	7984
------	------	------	------	------

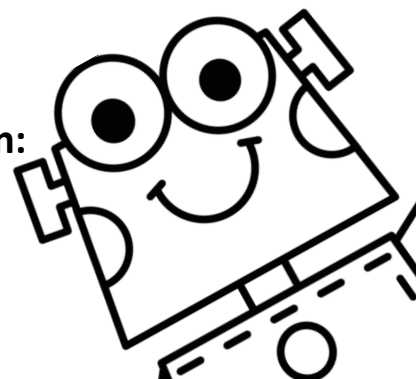
3189	3389	3589	3789	3989
------	------	------	------	------

2256	3256	4256	5256	6256
------	------	------	------	------

Here's your 3rd clue:

Tick which skip counting pattern occurs the most often:

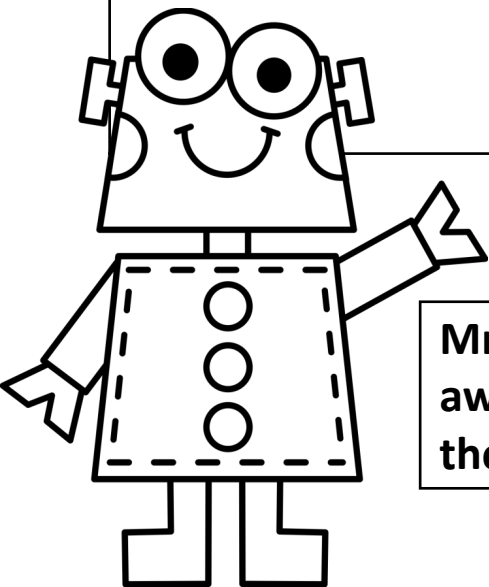
- 10s: It's not Mr Frazzlebone
- 20s: It's not Mrs Potts
- 100s: It's not the Mrs Zany



WORD PROBLEMS CLUE #4

Directions: Solve the following word problems:

<p>Jack has 324 marbles. His brother has double that amount. How many marbles does his brother have?</p> <p>648 marbles</p>	<p>Jen has 546 gems. Sam has 342 gems. How many gems do they have in total?</p> <p>888 gems</p>	<p>In an aviary, there are 110 blue birds and 321 green birds. How many birds in all?</p> <p>431 birds</p>
<p>There are 289 buzzing bees inside a hive and 145 bees outside the hive. How many bees in total?</p> <p>434 bees</p>	<p>If there are 672 pencils in one box, how many pencils are there in 2 boxes?</p> <p>1344 pencils</p>	<p>In the garden, there are 935 red flowers and 412 yellow flowers. How many flowers altogether?</p> <p>1347 flowers</p>



4th clue:

Mr Mac got the date wrong! He was actually away the day Robbie Robot went missing, therefore he is no longer a suspect...Phew!

MENTAL MATH CLUE #5

Directions: Solve and write your answers in the boxes below:

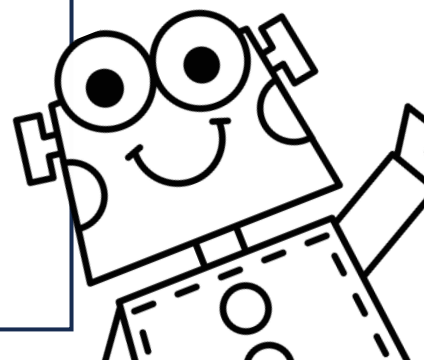
Mental Math	Write your answers
1 dozen	12
6 groups of 10	60
12×8	96
$250 + 250 + 250 =$	750
Half of 192	96
How many days in a leap year?	366
375 add 15	390

Great job...You're halfway there!

This two-digit answer appears twice! Is it:

- 750
- 96
- 390

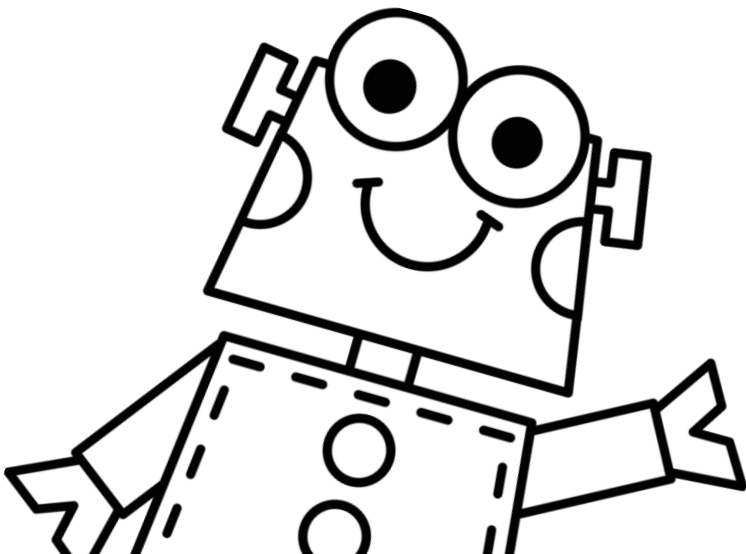
Go to the 'Top 10 Suspect Sheet' to locate this number and eliminate that suspect!



3D SHAPE CLUE #6

Directions: Draw a line to match the 3D shape to its description

cube	I have 8 sides
hexagon	A solid shape with no edges
octagon	I have 6 faces
sphere	I have 2 bases and no straight edges
cylinder	I have 5 sides



Clue 6:

Count how many 3D shapes are listed on this page. Then eliminate that number suspect!

MULTIPLICATION CLUE #7

Directions: Solve the following multiplication products:

$$\begin{array}{r} 45 \\ \times 4 \\ \hline 180 \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ \times 7 \\ \hline 434 \\ \hline \end{array}$$

$$\begin{array}{r} 86 \\ \times 5 \\ \hline 430 \\ \hline \end{array}$$

$$\begin{array}{r} 77 \\ \times 3 \\ \hline 231 \\ \hline \end{array}$$

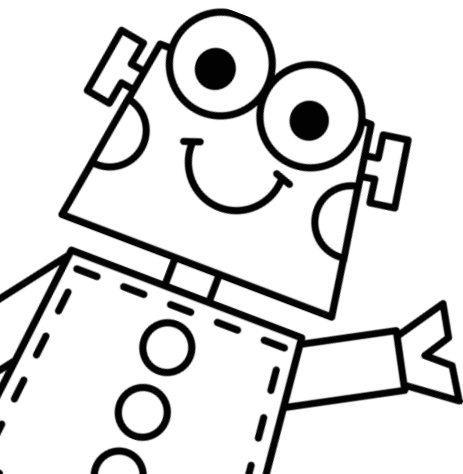
$$\begin{array}{r} 84 \\ \times 9 \\ \hline 756 \\ \hline \end{array}$$

$$\begin{array}{r} 90 \\ \times 2 \\ \hline 180 \\ \hline \end{array}$$

$$\begin{array}{r} 55 \\ \times 8 \\ \hline 440 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \\ \times 8 \\ \hline 232 \\ \hline \end{array}$$

$$\begin{array}{r} 68 \\ \times 6 \\ \hline 408 \\ \hline \end{array}$$



Clue 7:

For your next clue, you are looking for:

- A three-digit number
- An odd number greater than 200
- Once you find it, go to the 'Top 10 Suspects Sheet'
- Find the number and eliminate this suspect!

MATH STORIES CLUE #8

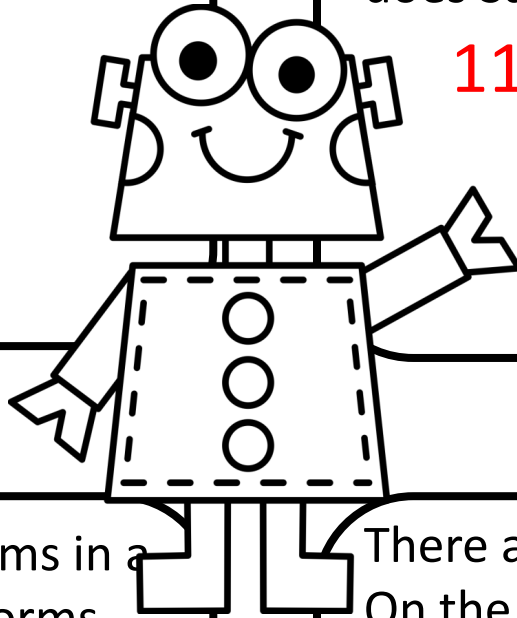
Directions: Solve the following and write your answers in the boxes:

There were 455 birds in a tree. 53 flew away. How many birds left?

402 birds

Sam has 347 marbles. He gives 237 to Tom. How many marbles does Sam have now?

110 birds



There 178 worms in a garden. 130 worms wriggle away. How many worms left?

48 worms

There are 629 leaves On the ground. The wind blows 419. How many leaves on the ground now?

210 birds

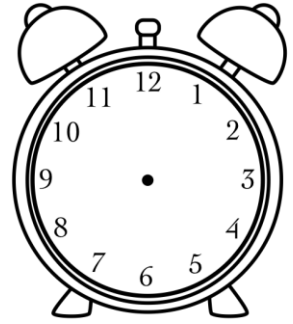
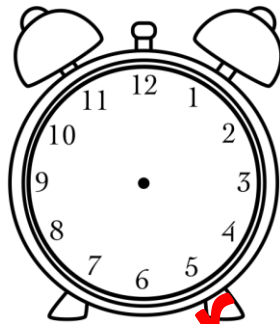
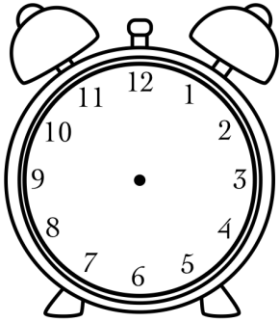
Circle this answer!

Clue:

- The number is between 200 and 220!
- Find this number on the Suspicious Suspects page and confidently eliminate that suspect!

TELLING THE TIME CLUE #9

Directions: Draw the hands on the clock to match the digital times:



12:34

7:07

10:55



9:14

3:23

8:25



4:18

1:39

6:29

Circle the third clock in the first row. Next, find this time on the 'Top 10 Suspicious Suspect Sheet.' Then eliminate this suspect!

COMPARING NUMBERS

CLUE # 10

Directions: Use the $>$, $<$ or $=$ to compare the following numbers:

$345 < 873$

$987 > 746$

$918 > 657$

$493 < 576$

$120 = 120$

$379 < 654$

$573 < 753$

$731 < 936$

Once you find the suspect, crack this code by unjumbling the letters to find out why Robbie Robot was taken:

e H d n e d e e
 |
g r e h c r a i g n

CREDITS



Font:

TeachersLoveTeaching