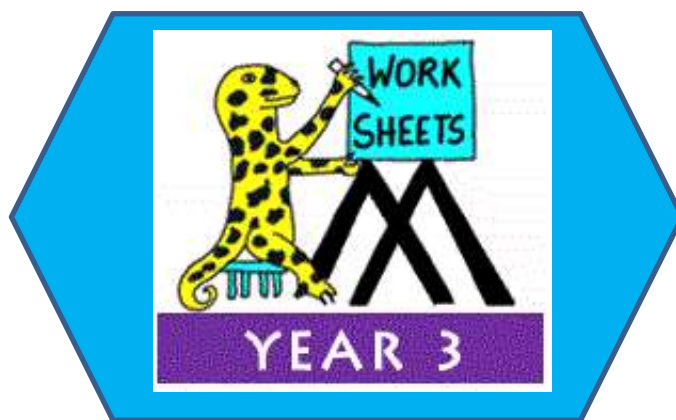
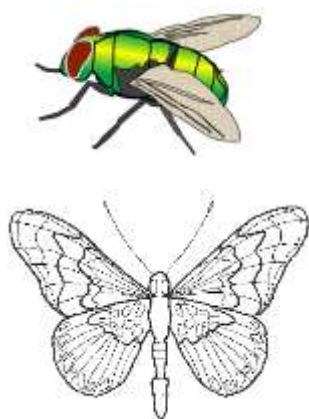


# MATH SALAMANDERS

## YEAR 3 MATHS GRAB PACK 4

This pack is a selection of 10 Maths sheets and 1 game adapted for Year 3 pupils.

All the worksheets are also available on our site.



In the pack is a range of number sheets, colouring pages, and puzzles.

There is also an answer pack which you can download separately.

CONTENTS (ANSWER SHEETS)			
1	Counting on and back by 1s and 10s #1	7	Problem Solving Fastest Insects
2	Reading, Writing and Comparing 3-digit numbers 1	8	Number Bonds to 20 Sheet 3
3	Newton's Number Track Puzzle 2	9	Colour by Number Addition to 20
4	Row of Coins Challenge 2	10	Mental Math Quiz 3:A4
5	Addition Facts – Adding 3 Digits	11	Classify It Game #2

Please give us feedback on our pack – both what you liked and what sheets you would like to see more of by leaving a comment on the link below.

<https://www.math-salamanders.com/maths-grab-packs.html>



## COUNTING ON AND BACK BY 1S & 10S SHEET 1

Each of these sequences goes on or back by ones or tens.

Fill in the missing numbers.

1) Count on by ones

65		67	68			71	
----	--	----	----	--	--	----	--

2) Count on by tens

29		49		69			99
----	--	----	--	----	--	--	----

3) Count back by ones

52			49	48			45
----	--	--	----	----	--	--	----

4) Count back by tens

86		66	56			26	
----	--	----	----	--	--	----	--

5) Count on by tens

	14		34	44			74
--	----	--	----	----	--	--	----

6) Count back by ones

	43		41			38	
--	----	--	----	--	--	----	--

7) Count on by ones

		91			94	95	
--	--	----	--	--	----	----	--

8) Count back by tens

	78		58		38		
--	----	--	----	--	----	--	--



# READING, WRITING AND COMPARING 3-DIGIT NUMBERS

## SHEET 1

162	328	273	184
680	204	127	95
755	827	951	616

In the table, can you find...?

A number between 100 and 150.	127
A number between 900 and 1000.	
A number smaller than 100.	
A number between 300 and 400.	
A number that has 6 tens.	
A number that has 5 ones.	
A number that has 6 hundreds.	
A number that has 2 digits the same.	
A number with no tens.	



*Remember 453 is 4 hundreds, 5 tens and 3 ones.*



## NEWTON'S NUMBER TRACK PUZZLE 2

Each number in the number track is made by adding the previous 2 numbers together.

Example

5	4	9	13	22
---	---	---	----	----

- The third number is made by adding the first 2 numbers  $5+4=9$
- The fourth number is made by adding the 2<sup>nd</sup> and 3<sup>rd</sup> numbers:  $4+9=13$

Find and fill in the missing numbers in these number tracks.

1) 

4	5	9		
---	---	---	--	--

2) 

9	2			
---	---	--	--	--

3) 

3	6			
---	---	--	--	--

4) 

8	5			
---	---	--	--	--

5) 

4	7			
---	---	--	--	--

6) 

5	6			
---	---	--	--	--

7) 

11	4			
----	---	--	--	--

8) 

3		9		
---	--	---	--	--

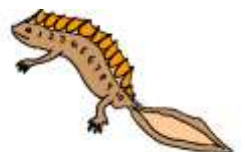
9) 

	7	12		
--	---	----	--	--

10) 

6				21
---	--	--	--	----

Can you make your own Number Track puzzle for someone else to solve?



## ROW OF COINS CHALLENGES 2



*Use the same coins (above) for both challenges.*

### CHALLENGE A

Put the coins above in a row so that:

- the first two coins add up to 6 pence
- there are 2 coins between the two 5p coins
- the middle coin has the highest value
- the first coin is not a 5p coin

### CHALLENGE B

Put the coins above in a row so that:

- the first 3 coins add up to 13 pence
- the last 3 coins add up to 11 pence
- the middle coin has the lowest value
- the two copper coins are next to each other.



## ADDITION FACTS ADDING 3 DIGITS SHEET 2

All these facts involve adding 3 digits together. Work out the answers.

1)  $7 + 6 + 2 = \underline{\quad}$

2)  $4 + 5 + 3 = \underline{\quad}$

3)  $5 + 8 + 4 = \underline{\quad}$

4)  $9 + 2 + 3 = \underline{\quad}$

5)  $6 + 7 + 4 = \underline{\quad}$

6)  $2 + 9 + 8 = \underline{\quad}$

7)  $4 + 7 + 5 = \underline{\quad}$

8)  $6 + 6 + 4 = \underline{\quad}$

9)  $8 + 5 + 2 = \underline{\quad}$

10)  $4 + 8 + 4 = \underline{\quad}$

11)  $5 + 3 + 9 = \underline{\quad}$

12)  $1 + 7 + 8 = \underline{\quad}$

13)  $7 + 8 + 5 = \underline{\quad}$

14)  $3 + 8 + 6 = \underline{\quad}$

15)  $5 + 9 + 4 = \underline{\quad}$

16)  $4 + 4 + 8 = \underline{\quad}$

17)  $7 + 3 + 8 = \underline{\quad}$

18)  $9 + 4 + 6 = \underline{\quad}$

19)  $5 + 6 + 7 = \underline{\quad}$

20)  $8 + 5 + 9 = \underline{\quad}$

21)  $4 + 8 + 6 = \underline{\quad}$

22)  $9 + 4 + 8 = \underline{\quad}$

23)  $6 + 7 + 6 = \underline{\quad}$

24)  $8 + 9 + 5 = \underline{\quad}$

25)  $5 + 9 + 9 = \underline{\quad}$

26)  $7 + 5 + 8 = \underline{\quad}$

27)  $8 + 9 + 7 = \underline{\quad}$

28)  $4 + 6 + 9 = \underline{\quad}$

29)  $9 + 5 + 7 = \underline{\quad}$

30)  $9 + 8 + 9 = \underline{\quad}$

*Challenge: Find 3 even numbers that add up to 14.*

*Each of the numbers should be different.  $\underline{\quad} + \underline{\quad} + \underline{\quad} = 14$*



## FIND THE 2 DIGITS! SHEET 2

Tyger Salamander has stolen 2 digits from the pack of digit cards.



He tells the other salamanders that he will give them back if they can guess what number he has made with them.

He tells them:

- My number is more than 30.
- My 2 digits add up to 10.

What 2-digit number could he have made?

Find all possibilities.

## PROBLEM SOLVING: FASTEST INSECTS (STANDARD)

Here are some of the fastest flying insects!

Insect	Speed miles per hour (mph)	Nearest 10 mph	Order of speed
Bumblebee		20	
Deer Bot Fly	27		
Dragonfly	40	40	1
Hawkmoth			
Hornet	21		
Monarch butterfly			

1) Use the facts below to complete the missing data in the table:

- *The bumblebee is 3 mph slower than a hornet.*
- *The hawkmoth is 7 mph faster than a deer bot fly.*
- *The monarch butterfly is 5 mph slower than a hornet.*



2) Round the speeds to the nearest 10 mph. Put the results in the table.

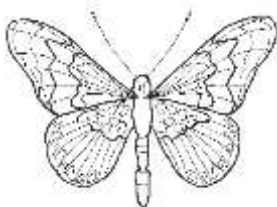
3) Fill in the order of speed, with 1 being the fastest, and 6 the slowest.

4) How much faster is the dragonfly than the hawkmoth? \_\_\_\_\_ mph

5) How much slower is the monarch than the bumblebee? \_\_\_\_\_ mph

6) How much faster is a deer bot fly than a hornet? \_\_\_\_\_ mph

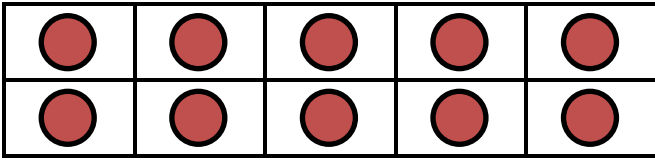
7) How many miles could a hornet fly in 2 hours? \_\_\_\_\_ miles



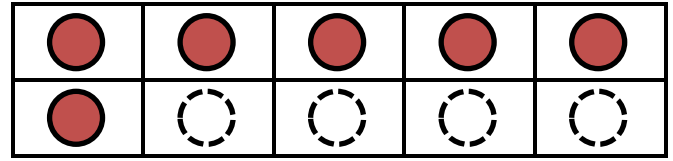


## NUMBER BONDS TO 20 SHEET 3

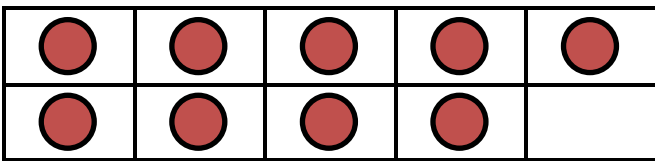
Complete the tens frame and fill in the missing number bond facts.



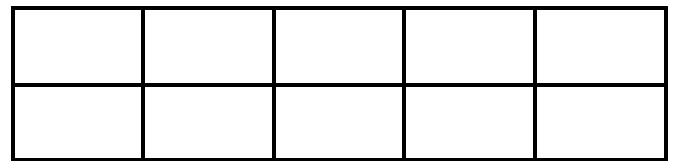
$16 + 4 = 20 \quad 4 + 16 = 20$



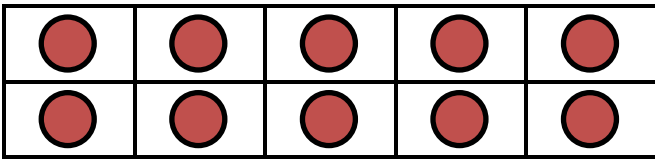
$20 - 16 = 4 \quad 20 - 4 = 16$



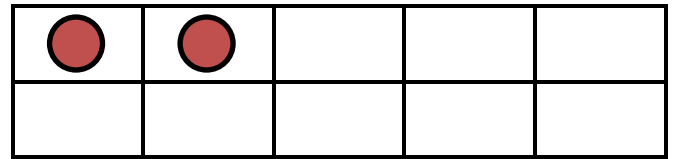
$9 + \underline{\quad} = 20 \quad \underline{\quad} + 9 = 20$



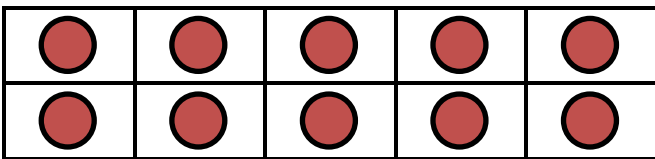
$20 - 9 = \underline{\quad} \quad 20 - \underline{\quad} = 9$



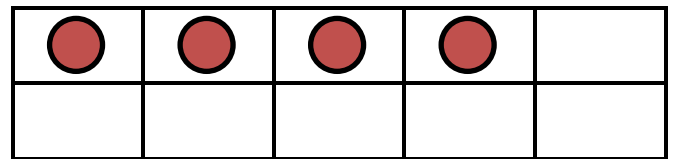
$12 + \underline{\quad} = 20 \quad \underline{\quad} + 12 = 20$



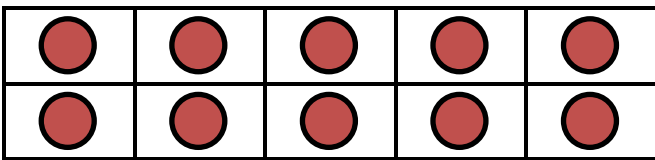
$20 - 12 = \underline{\quad} \quad 20 - \underline{\quad} = 12$



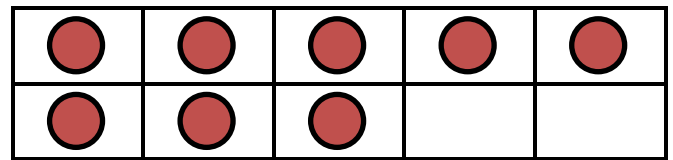
$14 + \underline{\quad} = 20 \quad \underline{\quad} + 14 = 20$



$20 - 14 = \underline{\quad} \quad 20 - \underline{\quad} = 14$



$18 + \underline{\quad} = 20 \quad \underline{\quad} + 18 = 20$



$20 - 18 = \underline{\quad} \quad 20 - \underline{\quad} = 18$



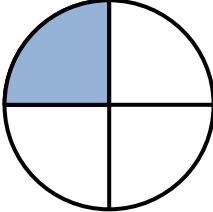

## EASTER COLOUR BY NUMBER: CHICK ADDITION TO 20

10+8	5+13	1+19	6+14	7+11	6+6	7+5	7+8	2+12	4+9	8+10	14+6	7+12	10+9	6+12	9+9
17+2	2+17	6+13	7+11	3+2	10+2	10+6	2+13	8+8	1+14	1+11	7+7	8+11	16+2	14+4	6+12
10+8	5+13	9+9	5+7	9+4	16+0	4+12	8+7	6+9	3+13	7+9	5+15	16+3	18+2	11+8	3+17
5+14	16+3	7+11	9+10	4+12	6+10	13+3	11+4	9+8	10+7	3+13	8+8	6+14	8+10	7+12	18+2
16+2	14+5	10+8	17+3	13+2	5+10	9+7	4+13	8+9	6+10	13+4	10+7	5+13	3+15	18+0	15+3
4+14	7+12	10+9	4+14	3+14	8+10	15+1	8+7	10+5	9+8	6+14	16+1	17+1	13+5	6+14	18+1
3+16	5+14	3+9	17+3	3+12	4+11	7+10	5+4	1+10	6+10	8+8	11+6	5+15	5+8	1+2	13+6
12+8	6+6	4+0	6+9	11+6	0+16	6+4	1+8	6+5	3+8	5+12	8+7	4+12	13+2	3+15	16+4
10+9	9+7	2+14	15+2	7+10	6+9	12+3	7+3	10+0	17+0	5+10	6+11	4+11	2+0	10+5	6+8
13+3	10+6	9+8	4+8	1+3	4+11	13+2	10+7	4+12	16+0	3+14	1+1	10+2	6+7	8+7	4+11
11+7	8+8	3+3	2+6	11+2	0+0	2+14	5+10	3+10	8+7	5+7	7+6	7+0	3+5	4+4	6+13
15+4	2+10	4+9	8+6	1+7	5+2	1+11	1+15	3+10	7+7	1+5	3+4	5+9	2+12	2+2	20+0
3+17	4+6	9+2	4+7	14+0	4+8	5+1	4+4	2+5	5+7	6+8	7+5	4+5	10+1	3+8	2+17
7+12	2+3	9+3	5+6	7+2	1+8	4+8	10+4	7+6	6+4	2+9	7+4	3+11	10+0	10+2	16+4
15+5	0+2	8+5	11+3	3+6	2+10	5+6	1+10	8+2	13+0	3+7	5+9	7+7	3+10	3+1	8+10
11+7	6+13	7+1	0+6	3+3	8+5	9+3	7+2	2+10	12+1	3+10	2+5	0+8	4+4	17+3	5+13
8+11	4+16	7+7	2+10	3+4	5+1	3+3	5+8	9+4	0+6	4+3	1+7	4+10	7+13	15+5	18+1
1+13	14+4	3+16	0+1	12+2	5+9	4+8	6+2	1+7	7+7	3+11	1+13	1+0	6+12	15+3	0+4
6+6	0+0	18+2	1+19	2+2	1+4	4+10	9+5	7+7	2+1	1+3	4+0	7+13	15+3	7+5	9+3
8+5	3+10	7+6	2+16	10+9	12+2	2+0	1+2	3+1	2+3	3+9	9+11	4+15	7+7	5+0	10+4

KEY		
0 to 5 white	6 to 8 green	9 to 11 red
12 to 14 blue	15 to 17 yellow	18 to 20 black



# MENTAL MATHS SHEET 3:A4

1)	$2 \times 6$	
2)	How many more is 18 than 13?	
3)	20 subtract 11	
4)	$80 + \underline{\quad} = 86$	
5)	What fraction is shaded? 	
6)	How many FIVES make 30p?	
7)	What is the next number? <b>89, 87, 85, 83, 81, <u>      </u></b>	
8)	How many socks in 6 pairs?	
9)	$5 + 7 = 10 + \underline{\quad}$	
10)	Double 14	
11)	$4 + 4 + 4 + 4 + 4 = 4 \times \underline{\quad}$	
12)	Flame has 9 chocolates which she shares between her 3 friends. How many do they each get?	
13)	What number is 10 more than 32?	
14)	How much money? 	
15)	How many mm in 8cm?	
16)	How many wheels on 3 cars?	

# CLASSIFY IT! GAME #2

*Classify It Game #2 is a good game for getting children to develop their understanding of different math vocabulary such as odd and even, equal to, greater/less than and between. It also helps to develop quick recall of addition facts of 3 small numbers.*

**Age range:** 2<sup>nd</sup> Grade +

**Number of players:** 2-3

**Learning:**

- Adding up the numbers on 3 dice
- Odd and even numbers to 18
- Vocabulary:
  - More/Greater than
  - Smaller/Less than
  - Between ... and ...

**You will need**

- 8 different coloured counters per player
- 3 dice (or one 20-sided dice)

**Instructions**

- Each player takes turns to roll the dice and add them up. The player then chooses one classification hexagon on the board which matches the total they have rolled. They cover this hexagon up with a counter.
- If a person cannot find any hexagon which matches their number, they pass the dice on to the next player.
- The game finishes when all the hexagons are covered up.
- The winner of the game is the person who manages to cover up most hexagons.

**Variations (if you want to change the rules...)**

- Alternative winning strategy:
  - The winner of the game is the first person to get 3 counters in a row (vertical or diagonal)
- Use a 20-sided dice instead of 3 six-sided dice.

# CLASSIFY IT!

## GAME #2



A grid of 15 hexagonal cells arranged in a honeycomb pattern. The cells are colored in alternating shades of light pink and light blue. Each cell contains a mathematical classification rule. The rules are:

- odd
- between 11 and 17
- equal to 7, 8 or 9
- greater than 10
- smaller than 11
- equal to 4, 6 or 12
- between 3 and 8
- even
- greater than 9
- odd or even
- less than 8
- between 8 and 14

