Stig on Tour
Activity Sheet

EducationCity

Name: _____ Class: _____

Read the facts below. Cross out the verb that does not agree with the subject.

1. Romans [**were** / ~~was~~] remarkable engineers and architects. They built amphitheatres and roads that we can still see evidence of today.

2. Egyptian kings, such as Tutankhamun, [~~was~~ / **were**] buried in tombs inside giant pyramids.

3. When stars collapse in on themselves, their gravitational pull increases. This creates a dense space where nothing, not even light, can escape. These areas in space [~~X~~ / **are**] called black holes.

4. Queen Elizabeth II [~~are~~ / **is**] Britain's longest reigning monarch. Interestingly, she [~~are~~ / **is**] the only person in the UK who is legally allowed to drive without a driving licence.

5. Virtual reality [~~are~~ / **is**] a computerised environment made up of three-dimensional images.

6. Turtles [~~has~~ / **have**] an extremely long life span, often living past one hundred.

7. Black bears [~~X~~ / **are**] found in many countries, including Canada.

8. Hong Kong [**has** / ~~have~~] over 300 skyscrapers, more than any other city in the world.

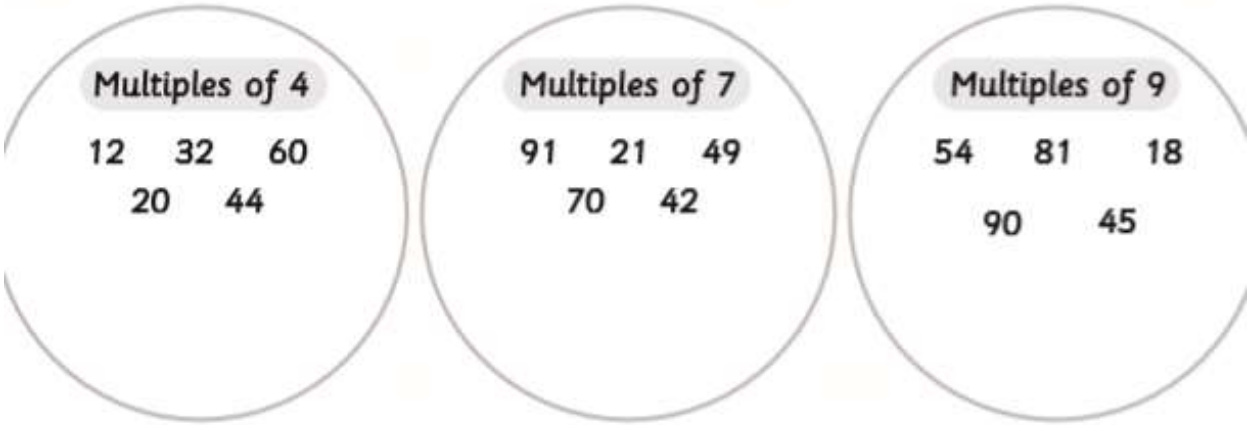
Bakers Dozen Part 1

Activity Sheet: Answer Sheet

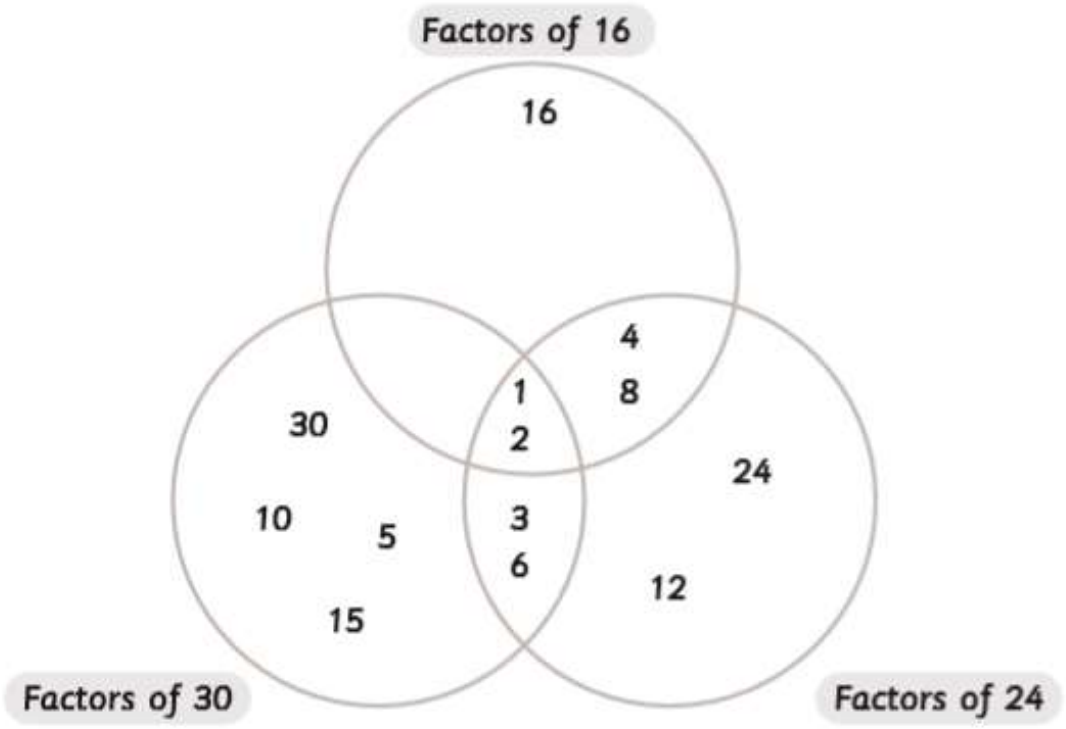
EducationCity

Name: _____ Class: _____

Sort the multiples into the correct circles.



Complete the Venn diagram below with the factors of 16, 30 and 24.



What a Trip

Activity Sheet

EducationCity

Name: _____ Class: _____

Underline the incorrect verbs in the text.

It was a warm and sunny Saturday, perfect for a visited (visit) to the local farm park. Stig and Granny thought it would be a fun way to spending (spend) the day together. Stig loved the animals, and Granny enjoying (enjoyed) visiting the tea rooms. When they arrive (arrived), they were just in time for the tractor ride, which taked (took) them all round the farm. The tractor bumped and bounced over the rough farm paths, and they clung onto the straw bales they were sitting on. The noise of the engine caused the sheep to gambled (gamble) across the fields, and the goats to run into their shelters. After the ride, picking straw from their clothes, Granny and Stig headed off to see the Shetland ponies in their paddocks.

After they finishing (finished) stroking the ponies, Granny was ready for her afternoon tea. Stig didn't want to miss out on something delicious to eaten (eat), so went with her to the café. They ate scones and jam and drunk (drank) homemade lemonade.

Before they left, they goes (went) to saw the animals in the barn. Stig holded (held) the rabbits and hamsters. Granny couldn't be persuaded to buy him one though!

Newton and Gravity **Answers**

1. When was Isaac Newton born?
   Isaac Newton was born in 1643.
2. Why do you think the outbreak of plague forced Newton to move from Cambridge back to Woolsthorpe Manor?
   He was forced to move away from the city when Plague broke out because he would be less likely to catch the infectious disease in the country.
3. What inspired Newton to explore the force of gravity?
   The sight of an apple falling from a tree inspired Newton to explore the force of gravity.
4. How did Newton describe the way gravity pulls objects?
   He described gravity as being like a 'drawing power' from the centre of the Earth.
5. What did Newton discover about the way gravity affects the Moon?
   He discovered that the Earth exerts its gravitational force on the moon and this causes it to stay in orbit.
6. Why do you think forces are measured in newtons with a newton metre?
   Newtons and the newton meter are named after Isaac Newton because of the discoveries he made to do with forces.
7. Look at this phrase: *Even Albert Einstein, writing in 1927, 200 years after Newton's death, described Newton as a 'shining spirit'*. What does the word 'Even' make you think about Albert Einstein?
   It makes me think that Albert Einstein must have had an impressive mind himself too.
8. Why do you think the National Trust have kept and looked after the apple tree in the gardens of Woolsthorpe Manor?
   Example answer: I think the tree and gardens have been preserved because the discoveries that Newton made were significant and so the place where the ideas were first formed should be kept safe for people to see when they learn about Isaac Newton.

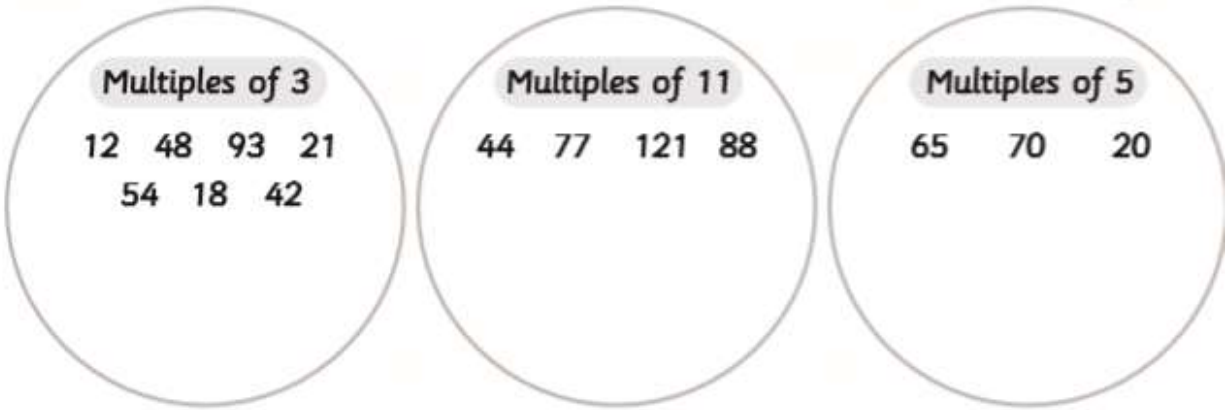
Bakers Dozen Part 2

Activity Sheet: Answer Sheet

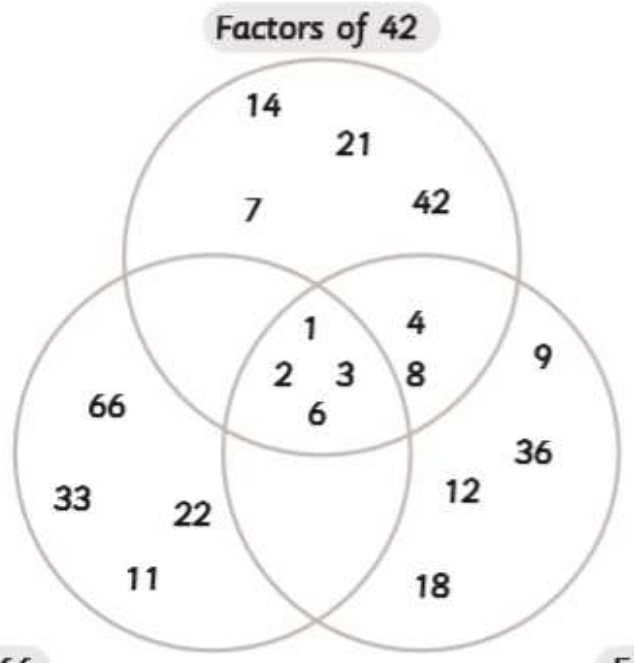
EducationCity

Name: _____ Class: _____

Sort the multiples into the correct circles.



Complete the Venn diagram below with the factors of 42, 66 and 36.



Number Cruncher

Activity Sheet

EducationCity

Name: _____ Class: _____

Circle all the square and cube numbers.

1. 25 | 35 | 54 | 64 | 81 | 121 | 135 | 144 | 162

2. 8 | 46 | 64 | 125 | 175 | 216 | 277 | 512 | 1,000

Complete the following calculations.

3. I am a 2 digit square number. One of my factors is a cube number.
The product of my digits is 8.
What number am I?

81

4. I am a two-digit square number, greater than 20.
The product of my two digits is 36.
What number am I?

49

5. I am a three-digit cube number.
Divide me by 5 to get a square number.
What number am I?

125

6. I am a 3-digit cube number with a factor of 6.
What number am I?

216

7. I am a 2-digit square number.
If you multiply me by 4, you get a 2-digit cube number.
What number am I?

16

8. I am a 2-digit square number.
Multiply me by 8 to get a 3-digit cube number.
What number am I?

64

9. I am a 2-digit square number, more than 50.
I am also a multiple of a cube number.
What number am I?

64

10. I am a 4-digit cube number.
I am a product of 10 and a 3-digit square number.
What number am I?

1,000

Opti-maths Prime

Activity Sheet

EducationCity

Name: _____ Class: _____

Help the Carbots to find Stig and his friends by plotting their path through the numbers. Be careful though, the Carbots can only travel on prime numbers and cannot travel diagonally.

3	7	23	75	38	72	2	5
4	6	83	81	41	47	97	49
32	45	61	11	13	77	80	51

6	12	15	21	16	20	85	91
31	11	37	41	27	35	72	48
18	22	57	19	71	7	11	19

79	61	12	78	81	7	19	31
80	97	15	18	13	17	100	45
8	67	73	5	3	27	98	99

Use the space below to work out which numbers are prime numbers.

MASTERS CHALLENGE 2 x 2 = 4	**24 ÷ 6= 4**	**10 x 9 = 90**
8 x 7 =56	**44 ÷ 4 = 11**	**8 x 12 =96**
3 x 3 = 9	**3 x 4 = 12**	**8 x 8 = 64**
5 x 4 = 20	**4 x 4 = 16**	**54 ÷ 9 = 6**
1 x 1 = 1	**5 x 3 = 15**	**40 ÷ 8 = 5**
48 ÷ 6 =8	**3 x 8 = 24**	**6 x 3 = 18**
28 ÷ 4 =7	**60 ÷ 12 =5**	**6 x 12 =72**
3 x 6 = 18	**36 ÷ 3 = 12**	**3 x 6 = 18**
4 x 7 = 28	**4 x 11 =44**	**4 x 12 =48**
4 x 5 = 20	**3 x 5 = 15**	**9 x 5 = 45**
9 x 7 =63	**9 x 11 =99**	**9 x 12 =108**
42 ÷ 7 =6	**4 x 8 = 32**	**8 x 9 = 72**
45 ÷ 5 =9	**12 x 11 = 132**	**12 x 12 =144**
5 x 6 = 30	**9 ÷ 1 = 9**	**10 ÷ 5 = 2**
3 x 7 = 21	**10 x 3 = 30**	**6 x 6 = 36**
2 x 9 =18	**9 x 9 = 81**	**90 ÷ 10 = 9**
36 ÷ 9 = 4	**8 x 3 = 24**	**10 x 10 = 100**
121 ÷ 11 = 11	**72 ÷ 9 = 8**	**10 x 3 = 30**
1 x 7 = 7	**66 ÷ 6 = 11**	**48 ÷ 4 = 12**
8 x 4 = 32	**1 x 10 =10**	**54 ÷ 6 = 9**
99 ÷ 9= 11	**6 x 5 = 30**	**108 ÷ 9 = 12**
5 x 7 = 35	**5 x 11 =55**	**5 x 12 = 60**
9 x 2 = 18	**2 x 8 = 16**	**8 x 10 = 80**
7 x 7 =49	**7 x 11 = 77**	**7 x 12 =84**
11 x 7 =77	**11 x 11 = 121**	**11 x 12 = 132**
6 x 10 = 60	**63 ÷ 7 = 9**	**3 x 9 = 27**
3 x 7 = 21	**3 x 11 = 33**	**3 x 12 = 36**
8 x 5 = 40	**4 x 10 = 40**	**18 ÷ 2 = 9**
2 x 11 = 22	**6 x 9 = 54**	**10 x 10 = 100**
8 x 7 = 56	**60 ÷ 5 = 12**	**12 ÷ 1 = 12**
4 x 7 = 28	**84 ÷ 7 = 12**	**9 x 7 = 63**
88 ÷ 8=11	**10 x 11 = 110**	**72 ÷ 6 = 12**
10 x 7 = 70	**10 x 11 = 110**	**10 x 12 = 120**
3 x 12 = 36	**120 ÷ 12 = 10**	**36 ÷ 3 = 12**

Master Master Challenge

72 ÷ 8 = 9	6 ÷ 1 = 6	56 ÷ 7 = 8	18 ÷ 2 = 9
64 ÷ 8 = 8	18 ÷ 3 = 6	24 ÷ 3 = 8	40 ÷ 8 = 5
28 ÷ 7 = 44	30 ÷ 6 = 5	8 ÷ 8 = 1	56 ÷ 7 = 8
9 ÷ 9 = 1	32 ÷ 8 = 4	12 ÷ 4 = 3	24 ÷ 6 = 4
54 ÷ 9 = 6	12 ÷ 4 = 3	35 ÷ 7 = 5	12 ÷ 2 = 6
40 ÷ 8 = 5	18 ÷ 6 = 3	15 ÷ 3 = 3	9 ÷ 1 = 9
1 ÷ 1 = 1	16 ÷ 8 = 2	56 ÷ 8 = 7	35 ÷ 7 = 5
63 ÷ 9 = 7	2 ÷ 2 = 1	36 ÷ 4 = 9	42 ÷ 6 = 7
27 ÷ 9 = 3	36 ÷ 4 = 9	9 ÷ 1 =9	15 ÷ 5 = 3
16 ÷ 2 = 8	54 ÷ 6 = 9	12 ÷ 6 = 2	6 ÷ 1 = 6
7 ÷ 1 = 7	72 ÷ 9 =8	36 ÷ 9 = 4	9 ÷ 9 = 1
12 ÷ 3 = 4	14 ÷ 2 = 7	30 ÷ 5 = 6	24 ÷ 6 = 4
27 ÷ 3 = 9	24 ÷ 4 = 6	6 ÷ 1 = 6	45 ÷ 5 = 9
10 ÷ 2 = 5	30 ÷ 6 = 5	48 ÷ 6 = 8	8 ÷ 4 = 2
16 ÷ 4 = 4	45 ÷ 9 = 9	2 ÷ 2 = 1	7 ÷ 1 = 7
3 ÷ 3 = 1	16 ÷ 4 = 4	21 ÷ 7 = 3	9 ÷ 9 = 1
18 ÷ 3 = 6	21 ÷ 7 = 3	9 ÷ 3 = 3	30 ÷ 5 = 6
40 ÷ 5 = 8	81 ÷ 9 = 9	30 ÷ 6 = 5	32 ÷ 4 = 8
32 ÷ 4 = 8	16 ÷ 2 = 8	14 ÷ 2 = 7	12 ÷ 3 = 4
24 ÷ 4 = 6	35 ÷ 5 = 7	56 ÷ 8 = 7	63 ÷ 9 = 7
45 ÷ 5 = 9	49 ÷ 7 = 7	36 ÷ 4 =9	24 ÷ 8 = 3
40 ÷ 5 = 8	54 ÷ 9 = 6	18 ÷ 9 = 2	25 ÷ 5 = 5
20 ÷ 4 = 5	15 ÷ 3 = 5	20 ÷ 5 = 4	32 ÷ 4 = 8
48 ÷ 6 = 8	20 ÷ 5 = 4	24 ÷ 8 = 3	36 ÷ 9 = 4
54 ÷ 6 = 9	28 ÷ 7 = 4	24 ÷ 4 = 6	48 ÷ 8 = 6