Year Six Home Learning Pack Spring Four Part 2

Multiplication Tables

This is such a good programme to help you learn your tables and that is why it is left on.

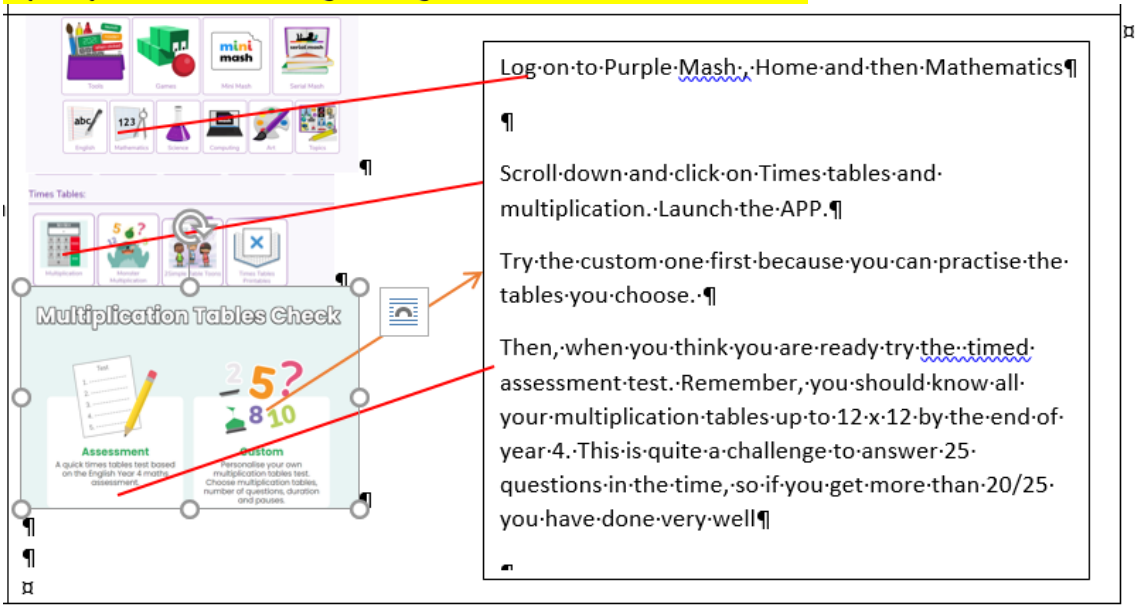
I hope you are able to log on to Purple mash to continue 5 to 10 minutes daily multiplication practise. This is such a good programme to learn your times tables.

Tip: Write some multiplication and division questions on separate pieces of paper and stick on the fridge, doors etc and recite them as you go by.

6 x 9 = 7 x8 = 9 x 7 = 28 ÷4 =

56 ÷__ = 8 How many 4's in 56

Tip: If you want to enlarge this go to view and zoom to 200%



Inverse Multiplication and Division practise

Example

Work out your 22 times table first

22, 44, 66,88 110, 132, 154, 176, 198, 220

```
  812
22)17865
  176
   26
   22
   45
   44
    1 r
```

Inverse Multiplication and Division

1) 17 865 ÷_____ = 22	11) _____ ÷ 27 = 509	21) _____ × 58 = 33 872
2) _____ ÷ 24 = 219	12) _____ × 11 = 6611	22) 29 574 ÷ _____ = 38
3) _____ × 26 = 23 426	13) 12 992 ÷ _____ = 14	23) _____ ÷ 59 = 659
4) 16 201 ÷ _____ = 17	14) _____ ÷ = 15 = 584	24) _____ × 47 = 9635
5) _____ ÷ 26 = 266	15) _____ × 19 = 2603	25) 37 248 ÷ _____ = 48
6) _____ × 21 = 17 367	16) 9405 ÷ _____ = 45	26) _____ ÷ 47 = 970
7) 6520 ÷ _____ = 20	17) _____ ÷ 44 = 534	27) _____ × 60 = 33 120
8) _____ ÷ 12 = 813	18) _____ × 59 = 29 441	28) 9512 ÷ _____ = 58
9) _____ × 17 = 11 917	19) 15 948 ÷ _____ = 36	29) _____ ÷ 44 = 57
10) 8091 ÷ _____ = 29	20) _____ ÷ 47 = 534	30) _____ × 44 = 14 212

```
  219
X  24
  876
 4380
 5256
```

REMEMBER : Each of these calculations is either a long division or long multiplication. Once you become confident with these operations you will become an expert with multiplication and division.

TIP: When doing long multiplication remember to put in the zero when multiplying by a multiple of 10. Enjoy your workout.

Inverse Multiplication and Division
Answers

Page 1

1) 17 865 ÷ 812 = 22
2) 5256 ÷ 24 = 219
3) 901 × 26 = 23 426
4) 16 201 ÷ 953 = 17
5) 6916÷ 26 = 266
6) 827 × 21 = 17 367
7) 6520 ÷ 326 = 20
8) 9756 ÷ 12 = 813
9) 701 × 17 = 11 917
10) 8091 ÷ 279 = 29
11) 13473 ÷ 27 = 509
12) 601 × 11 = 6611
13) 12 992 ÷ 928 = 14
14) 8760 ÷ = 15 = 584
15) 137 × 19 = 2603
16) 9405 ÷ 209 = 45
17) 25 098 ÷ 44 = 534
18) 499 × 59 = 29 441
19) 15 948 ÷ 443= 36
20) 25 098 ÷ 47 = 534
21) 584 × 58 = 33 872
22) 29 574 ÷ 783 = 38
23) 38 881÷ 59 = 659
24) 205 × 47 = 9635
25) 37 248 ÷ 776 = 48
26) 45 590÷ 47 = 970
27) 552 × 60 = 33 120
28) 9512 ÷ 164 = 58
29) 20 108 ÷ 44 = 57
30) 323 × 44 = 14 212

Reasoning and problem solving

Alex calculated 1,432 × 4

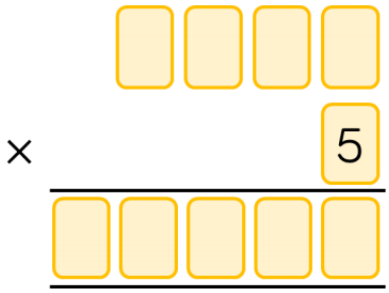
Here is her answer.

	Th	H	T	O
	1	4	3	2
×				4
	4	16	12	8

1,432 × 4 = 416,128

Can you explain what Alex has done wrong?

Can you work out the missing numbers using the clues?



- The 4 digits being multiplied by 5 are consecutive numbers.
- The first 2 digits of the product are the same.
- The fourth and fifth digits of the answer add to make the third.

Answers to reaoning and problem solving questions

Multiply 4-digits by 1-digit

Reasoning and Problem Solving

R

Alex calculated 1,432 × 4

Here is her answer.

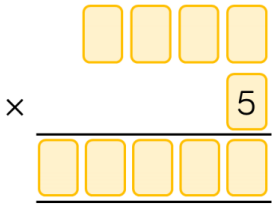
	Th	H	T	O
	1	4	3	2
×				4
	4	16	12	8

1,432 × 4 = 416,128

Can you explain what Alex has done wrong?

Alex has not exchanged when she has got 10 or more in the tens and hundreds columns.

Can you work out the missing numbers using the clues?



- The 4 digits being multiplied by 5 are consecutive numbers.
- The first 2 digits of the product are the same.
- The fourth and fifth digits of the answer add to make the third.

2,345 × 5 = 11,725

Eva says,

To multiply 23 by 57 I just need to calculate 20 × 50 and 3 × 7 and then add the totals.

What mistake has Eva made?
Explain your answer.

Amir hasn't finished his calculation. Complete the missing information and record the calculation with an answer.

×	40	2
40		
6		

Farmer Ron has a field that measures 53 m long and 25 m wide.

Farmer Annie has a field that measures 52 m long and 26 m wide.

Dora thinks that they will have the same area because the numbers have only changed by one digit each.

Do you agree? Prove it.

Reasoning and Problem Solving

R

Eva says,

To multiply 23 by 57 I just need to calculate 20 × 50 and 3 × 7 and then add the totals.

What mistake has Eva made?
Explain your answer.

Eva's calculation does not include 20 × 7 and 50 × 3
Children can show this with concrete or pictorial representations.

Amir hasn't finished his calculation. Complete the missing information and record the calculation with an answer.

×	40	2
40		
6		

Amir needs 8 more hundreds, 40 × 40 = 1,600 and he only has 800

His calculation is 42 × 46 = 1,932

Farmer Ron has a field that measures 53 m long and 25 m wide.

Farmer Annie has a field that measures 52 m long and 26 m wide.

Dora thinks that they will have the same area because the numbers have only changed by one digit each.

Do you agree? Prove it.

Dora is wrong. Children may prove this with concrete or pictorial representations.

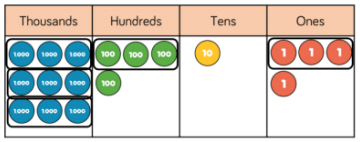
Jack is calculating 2,240 ÷ 7

He says you can't do it because 7 is larger than all of the digits in the number.

Do you agree with Jack?
Explain your answer.

Spot the Mistake

Explain and correct the working.



	3	1	0	1
3	9	4	1	4

Jack is calculating 2,240 ÷ 7

He says you can't do it because 7 is larger than all of the digits in the number.

Do you agree with Jack?
Explain your answer.

Jack is incorrect. You can exchange between columns. You can't make a group of 7 thousands out of 2 thousand, but you can make groups of 7 hundreds out of 22 hundreds.

The answer is 320

Spot the Mistake

Explain and correct the working.

	3	1	0	1
3	9	4	1	4

There is no exchanging between columns within the calculation.
The final answer should have been 3,138

Reasoning and problem solving

I am thinking of a 3-digit number.

When it is divided by 9, the remainder is 3

When it is divided by 2, the remainder is 1

When it is divided by 5, the remainder is 4

What is my number?

Tip: Think about the properties of numbers that work for each individual statement. This will help decide the best starting point.

Possible answers
129, 219, 309, 399, 489 579 669, 759, 849, 939

Always, Sometimes,

A three-digit number made of consecutive descending digits divided by the next descending digit always has a remainder of 1

765 ÷ 4 = 191 remainder 1

How many possible examples can you find?

Tip :
Consecutive integers are whole numbers that follow each other without gaps.

Sometimes

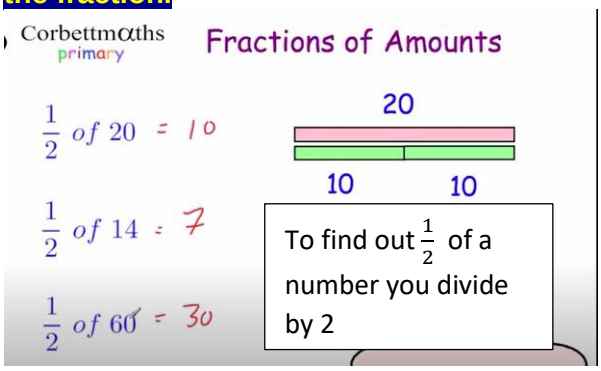
Possible answers:

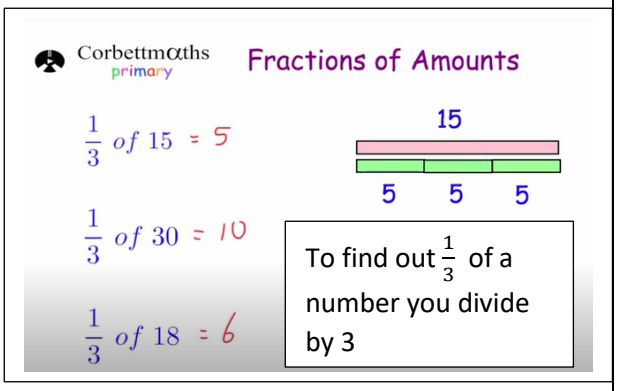
432 ÷ 1 = 432 r 0
543 ÷ 2 = 271 r 1
654 ÷ 3 = 218 r 0
765 ÷ 4 = 191 r 1
876 ÷ 5 = 175 r 1
987 ÷ 6 = 164 r 3

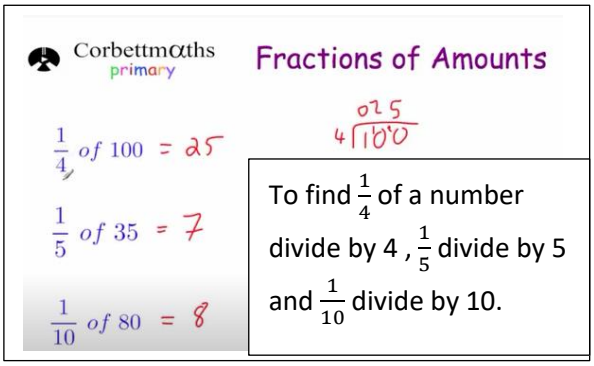
Fractions of amounts

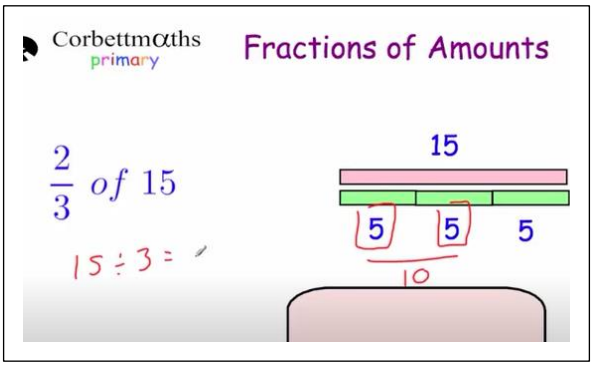
Finding fraction of amounts tests both your division and multiplication skills.

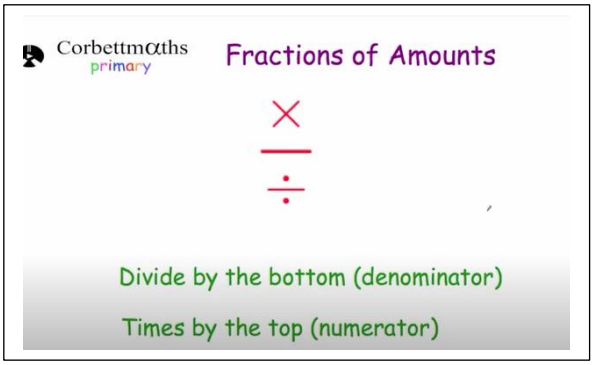
To find a fraction of an amount, simply divide the amount by the denominator on the bottom of the fraction and then multiply this result by the numerator on the top of the fraction.

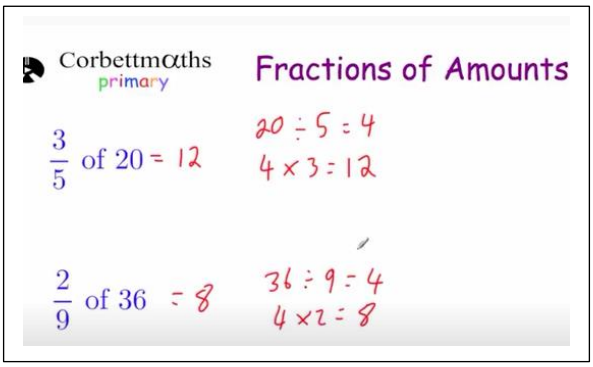


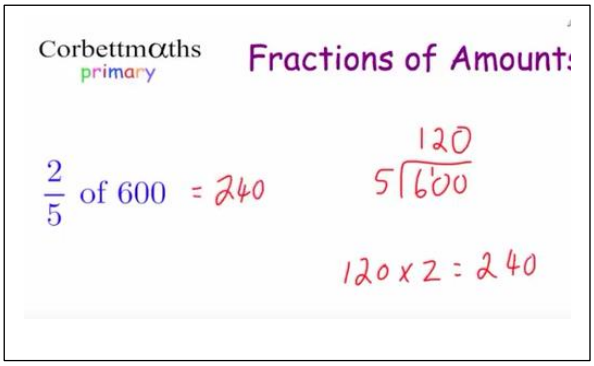












If you would like to follow this online use this link [Fractions of Amounts - Primary - YouTube]

Play this from nrich Fractions of Coins game

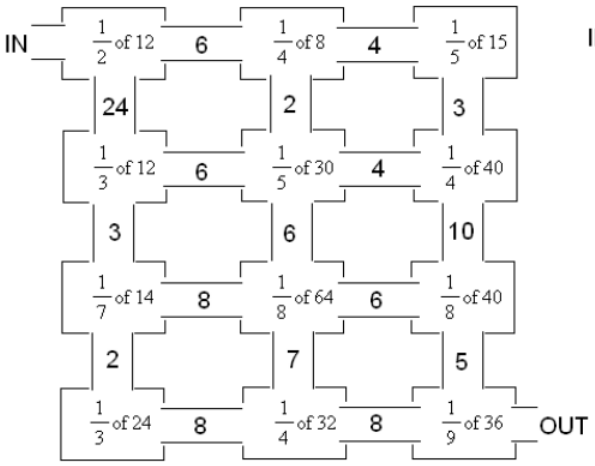
[Fractions and Coins Game (maths.org)]

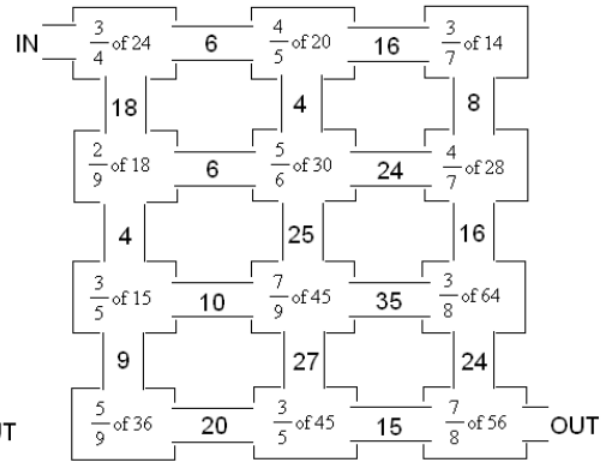
Maze game

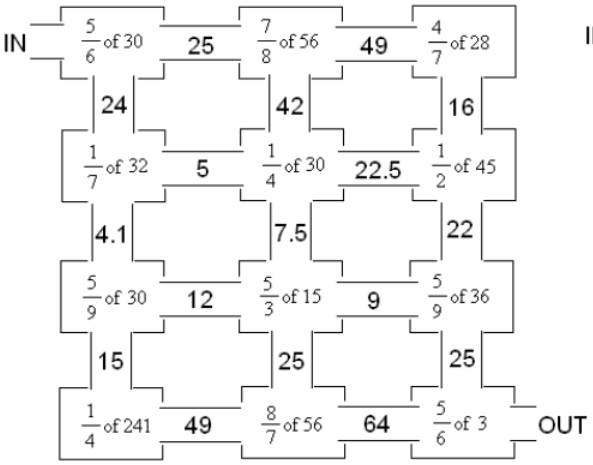
Just a reminder: If this is too small go to view then zoom and put it to 200%

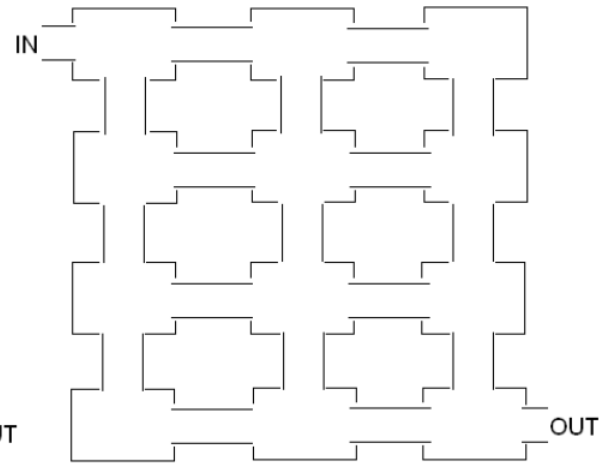
Fractions of Quantities Mazes

Name: _____









Multiplication tables Practise

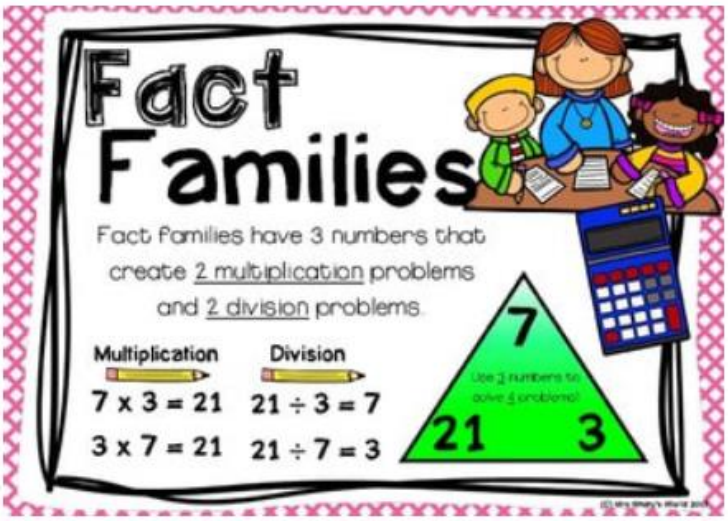
Remember,

practise

practise

practise

After all this amount of finding a fraction of an amount practice you should be ready to do the mixed times tables tests. Remember: you have 90 seconds to do a test so you have to be quite quick! !aA and 2aA are slightly easier than Mixed A because the fraction of amounts only have a numerator of 1 therefore you only have to divide because multiplying a number by 1 gives you the original number.



Or

If

5·3 x 9·4 = 49·82

then

9·4 x 5·3 = 49·82

49·82 ÷ 5·3 = 9·4

49·82 ÷ 9·4 = 5·3

Multiplication tests

Some of you may like to try some of the mixed table tests that we do in school. Remember that there is a time limit of 90 secs to do 20 questions.

¤	Mixed·1aA¶ Date:¶ ¤	¤
····1¤	5·x·12·¶ ¤	¤
2¤	$\frac{1}{2}$ of 12¤	¤
3¤	1·x·0·¶ ¤	¤
4¤	60÷·1·¶ ¤	¤
5¤	$\frac{1}{10}$·of·60·¶ ¤	¤
6¤	Double·25¶ ¤	¤
7¤	$\frac{1}{8}$ of 48¤	¤
8¤	$\frac{1}{4}$ of··of·28·¶ ¤	¤
9¤	$\frac{1}{4}$ of 36¤	¤
10¤	$\frac{1}{10}$ of 60¤	¤
11¤	22÷·2·¶ ¤	¤
12¤	$\frac{1}{10}$ of 60¤	¤
13¤	$\frac{1}{5}$ of 25¤	¤
14¤	$\frac{1}{7}$ of 63¤	¤
15¤	$\frac{1}{9}$ of 72¤	¤
16¤	$\frac{1}{6}$ of 36¤	¤
17¤	36÷·9·¶ ¤	¤
18¤	$\frac{1}{5}$ of 45¤	¤
19¤	$\frac{1}{5}$ of 60¤	¤
20¤	44÷11=·¶ ¤	¤
¤	¶ Time·90·secs·¤	¤
¤	Total·¶ ¤	¤

¤	Mixed·2aA¶ Date:¶ ¤	¤
····1¤	8·x·9·¶ ¤	¤
2¤	$\frac{1}{2}$ of 240¤	¤
3¤	10·x·34·7¶ ¤	¤
4¤	1800÷·1·¶ ¤	¤
5¤	$\frac{1}{10}$·of·600¶ ¤	¤
6¤	Double·28¶ ¤	¤
7¤	4900÷100¶ ¤	¤
8¤	$\frac{1}{4}$ of··of·48·¶ ¤	¤
9¤	$\frac{1}{5}$ of 35¤	¤
10¤	$\frac{1}{9}$ of 63¤	¤
11¤	80÷·2·¶ ¤	¤
12¤	$\frac{1}{10}$ of 60¤	¤
13¤	$\frac{1}{5}$ of 25¤	¤
14¤	$\frac{1}{7}$ of 630¶ ¤	¤
15¤	$\frac{1}{9}$ of 810¤	¤
16¤	$\frac{1}{6}$ of 420¤	¤
17¤	3600÷·9·¶ ¤	¤
18¤	$\frac{1}{5}$ of 45¤	¤
19¤	$\frac{1}{3}$ of 60¤	¤
20¤	55000÷11=·¶ ¤	¤
¤	¶	¤

¤	Mixed·A¶ Date:¤		¤
····1¤	5·x·12·¶ ¤	¤	¤
2¤	$\frac{1}{2}$ *of* 120¤	¤	¤
3¤	1·x·0·¶ ¤	¤	¤
4¤	60·÷·1·¶ ¤	¤	¤
5¤	$\frac{1}{10}$·of·60·¶ ¤	¤	¤
6¤	Double·425¶ ¤	¤	¤
7¤	$\frac{1}{8}$ *of* 48¤	¤	¤
8¤	¼·of·28·¶ ¤	¤	¤
9¤	$\frac{1}{4}$ *of* 48¤	¤	¤
10¤	$\frac{1}{10}$ *of* 600¤	¤	¤
11¤	26·÷·2·¶ ¤	¤	¤
12¤	$\frac{3}{10}$ *of* 600¤	¤	¤
13¤	$\frac{3}{4}$ *of* 24¤	¤	¤
14¤	$\frac{7}{8}$ *of* 64¤	¤	¤
15¤	$\frac{3}{8}$ *of* 72¤	¤	¤
16¤	$\frac{3}{4}$ *of* 36¤	¤	¤
17¤	36·÷·9·¶ ¤	¤	¤
18¤	$\frac{1}{5}$ *of* 45¤	¤	¤
19¤	$\frac{3}{5}$ *of* 60¤	¤	¤
20¤	44·÷·11=·¶ ¤	¤	¤
¤	¶ Time·90·secs·¤	¤	¤
¤	Total·¶ ¤	¤	¤

¤	Mixed·B¶ Date:¶ ¶ ¤		¤
·1¤	6·x·12·¶ ¤	¤	¤
2¤	$\frac{1}{2}$ *of* 220¤	¤	¤
3¤	3·x·0·¶ ¤	¤	¤
4¤	500·÷·1·¶ ¤	¤	¤
5¤	$\frac{1}{10}$·of·500·¶ ¤	¤	¤
6¤	Double·335¶ ¤	¤	¤
7¤	$\frac{1}{8}$ *of* 24¤	¤	¤
8¤	¼·of·32¶ ¤	¤	¤
9¤	$\frac{1}{4}$ *of* 36¤	¤	¤
10¤	$\frac{1}{10}$ *of* 700¤	¤	¤
11¤	28·÷·2·¶ ¤	¤	¤
12¤	$\frac{3}{10}$ *of* 500¤	¤	¤
13¤	$\frac{3}{4}$ *of* 28¤	¤	¤
14¤	$\frac{3}{8}$ *of* 64¤	¤	¤
15¤	$\frac{5}{8}$ *of* 72¤	¤	¤
16¤	$\frac{3}{4}$ *of* 44¤	¤	¤
17¤	36·÷·4·¶ ¤	¤	¤
18¤	$\frac{1}{5}$ *of* 55¤	¤	¤
19¤	$\frac{3}{5}$ *of* 30¤	¤	¤
20¤	55·÷·11=·¶ ¤	¤	¤
¤	¶ Time·90·secs·¤	¤	¤
¤	Total·¶ ¤	¤	¤

·¶

Game

Countdown (maths.org)

Countdown

Age 7 to 14
Challenge Level ★

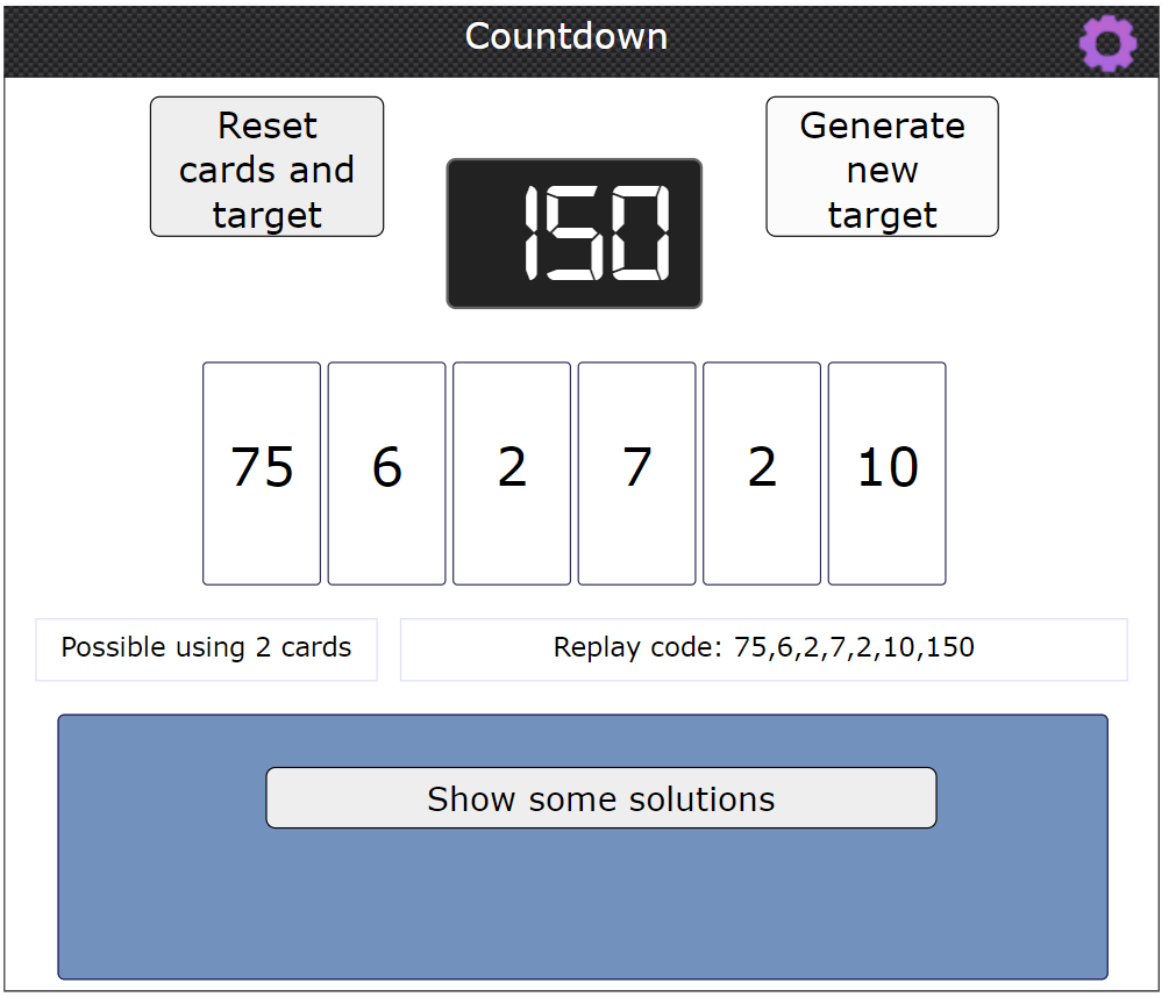
Here is a chance to play a version of the classic **Countdown Game**.

The challenge is to use the numbers available and the four standard operations (addition, subtraction, multiplication and division) to hit the target.

Start by choosing any six cards. The top row always contains the numbers 25, 50, 75 and 100, and the bottom row contains the numbers 1 to 10. Alternatively you could click on "Quickstart". Then click on "Generate new target" and the computer will choose a target.

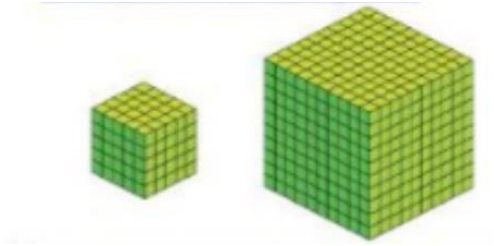
You can only use each card once in your solution, and it is always possible to find a solution.

You may like to explore different levels of the game using the Settings menu (the purple cog).



A) What is a cubed number?

B) what cubed numbers to these images represent?



C) Is 9 a cubed number?

D) List all the cubed numbers to 100.

E) Complete the table.

		8
3^3	3X3x3	**27**
4^3		
5^3	5x5x5	
	6x6x6	

F) What would the next number in the table be?

G)
Tick the calculation that is the same as 7^3

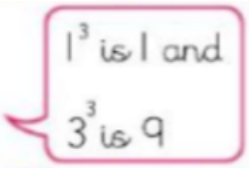
7 x 3 ☐ 7 +7+7 ☐ 7x7x7 ☐

H) Which number is bigger 4^2 or 3^3?

I) Match the calculations

4^3	4 x 2
5^3	9 x 3
2^3	16 x 4
3^3	25 x 5

J) Aaron says



What mistake has he made?

K) Here are 3 cards

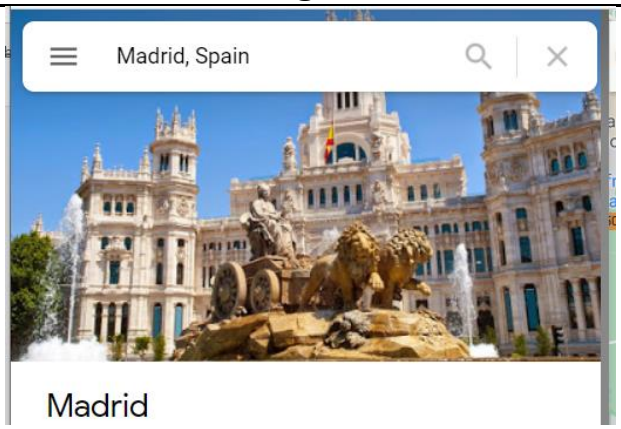
On each card is a cube number. Use the se calculations to find each number.

A x A = B

B + B – 3 = C

Digit total of C = A

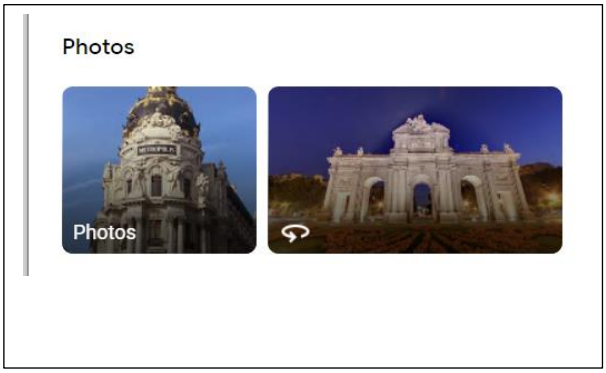
SPANISH Geography



Madrid

Quick facts

Madrid, Spain's central capital, is a city of elegant boulevards and expansive, manicured parks such as the Buen Retiro. It's renowned for its rich repositories of European art, including the Prado Museum's works by Goya, Velázquez and other Spanish masters. The heart of old Hapsburg Madrid is the portico-lined Plaza Mayor, and nearby is the baroque Royal Palace and Armory, displaying historic weaponry.



Map of Spain

Task Imagine you work in a travel agency and you are persuading tourists to visit Madrid the capital of Spain. Make a leaflet to give information about Madrid and why people should visit.

Example of a leaflet	

WELCOME TO MADRID

1º E.S.O.- A

Irene VAQUERO POZA

Madrid *is the capital of Spain. The population is 3,000,000 people. Madrid is very big and noisy, but it is beautiful too and there are lots of interesting things to do.*

The colour of flag is red and it has got seven white stars.

In Madrid you can take the underground, taxis, buses, trains, etc...

Madrid is very famous in the world because actors who work for films come to visit it.

Madrid has got a lot of shops, restaurants, cafés....
If you come to Madrid you should visit:

- *Prado Museum*
- *Royal Palace*
- *Retiro Park*
- *The botanical garden*
- *Reina Sofía Museum*
- *The Senate building*
- *The Congress building*

Every year Madrid celebrates the White Night. This day the museums and other places are open all night long. People can go and visit them. When you visit a museum, you don't pay for a ticket because they are free!

Talking about food, these dishes are typical in Madrid:

- *Cocido madrileño*
- *Callos*
- *Sopas de ajo*
- *Casquería general*
- *Rosquillas tontas y listas*
- *Huesos de santo*
- *Torrijas*

People in Madrid celebrate Nuestra Señora de la Almudena on the 9th October and Saint Isidro on the 15th May. This day people enjoy the typical folk dance called "the Chotis".

Spanish phrases

Spanish Phrases

Complete the tables using the bank of Spanish words given.

¡Hola! Hasta luego AdiÓs ¡Buenas tardes! Mal ¿De dónde eres? ¡Buenos días! Sí ¿Qué tal? Hasta mañana ¡Buenas noches! de nada Por favor ¿Cómo te llamas? Encantado Bien ¿Cuántos años tienes? No entiendo No Yo soy de... Me llamo Tengo ___ años. No lo sé

Hello	
Hello / Good morning	
Good afternoon	
Good evening / Good night	
Goodbye	
Please	
See you later	
See you tomorrow	
You're welcome	
How are you? / How's it going?	
Good	
Bad	

Yes	
No	
What is your name?	
My name is...	
Nice to meet you	
Where are you from?	
I am from...	
How old are you?	
I am ___ years old.	
I don't understand	
I don't know	

Spanish phrase answers

Spanish Phrases Answers

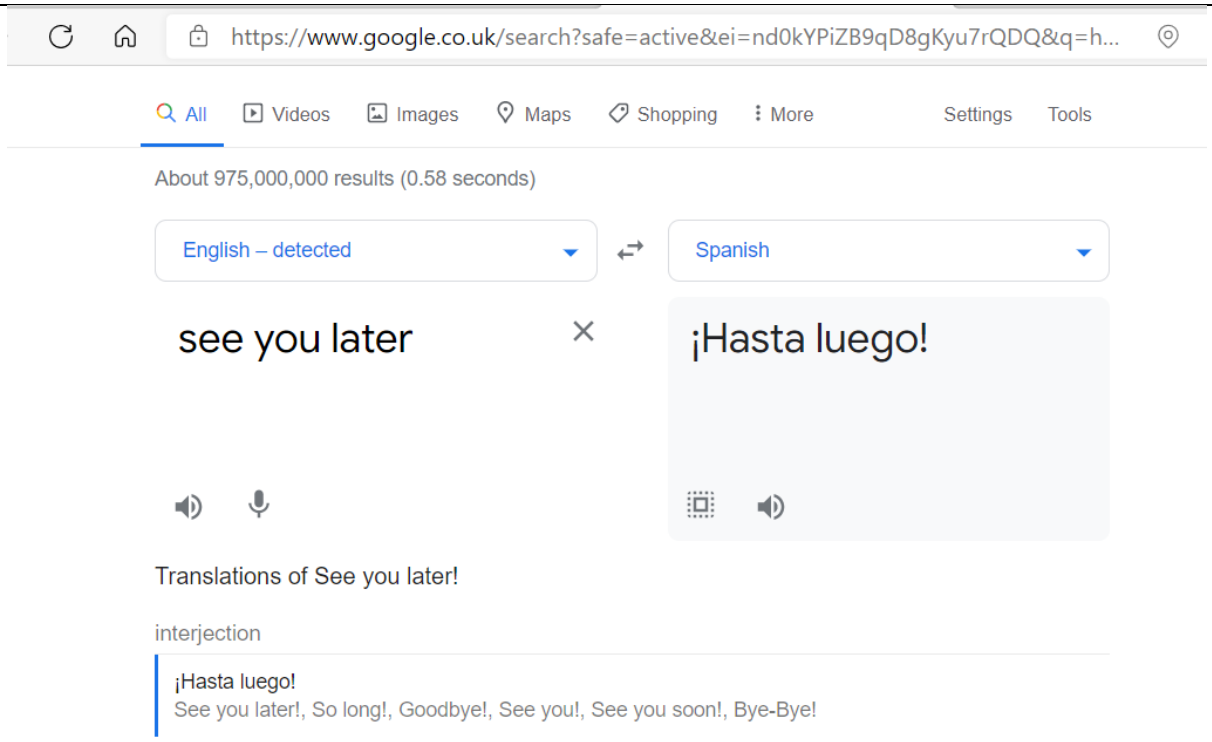
Complete the tables using the bank of Spanish words given.

¡Hola! Hasta luego AdiÓs ¡Buenas tardes! Mal ¿De dónde eres? ¡Buenos días! Sí ¿Qué tal? Hasta mañana ¡Buenas noches! de nada Por favor ¿Cómo te llamas? Encantado Bien ¿Cuántos años tienes? No entiendo No Yo soy de... Me llamo Tengo ___ años. No lo sé

Hello	¡Hola!
Hello / Good morning	¡Buenos días!
Good afternoon	¡Buenas tardes!
Good evening / Good night	¡Buenas noches!
Goodbye	Adios
Please	Por favor
See you later	Hasta luego
See you tomorrow	Hasta mañana
You're welcome	De nada
How are you? / How's it going?	¿Qué tal?
Good	Bien
Bad	Mal

Yes	Sí
No	No
What is your name?	¿Cómo te llamas?
My name is...	Me llamo...
Nice to meet you	Encantado
Where are you from?	¿De dónde eres?
I am from...	Yo soy de...
How old are you?	¿Cuántos años tienes?
I am ___ years old.	Yo tengo _____ años.
I don't understand	No entiendo
I don't know	No lo sé

Help at hand
If you need support to pronounce words google how do you say: See you tomorrow in Spanish
If you click on the speaker it will tell you



Task
Make a comic strip of a conversation you might have with some other people
