

# Domino Activities

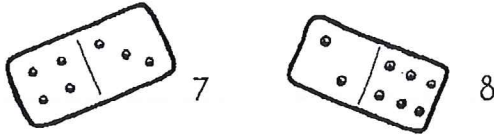


## Activities

### Count up (YR-4)

Play this game with a friend.

Spread all the dominoes face down on the table. Choose a domino each and count the spots.

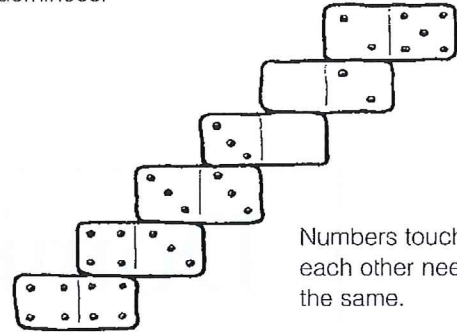


Whoever has the highest number of spots keeps both dominoes. If the total is the same, keep one each.

Carry on until you have used all the dominoes and see who wins the most.

### Stairways (YR-5)

With a partner, make a long stairway with all the dominoes.

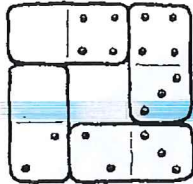


Numbers touching each other need to be the same.

Can you make a stairway if the numbers touching have a difference of 1?

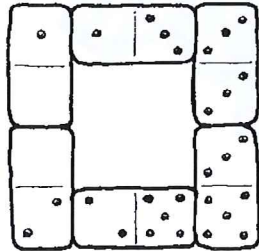
### Loops (YR-5)

Make a loop of four dominoes, matching numbers that are the same.



How many loops can you make with the whole set of dominoes?

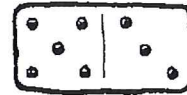
What happens if you try making larger loops?



### What's the difference? (Y1-30, 36)

A game for two players.

Spread the dominoes face down on the table. Take turns to pick a domino and work out the difference between the two numbers.



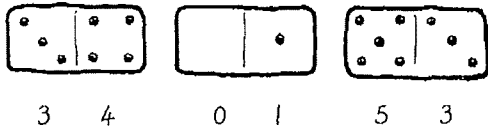
$$5 - 3 = 2$$

The difference is your score. Keep adding your scores.

The winner is the first player to reach 20 points.

### Make 10 (or 20) (Y1-30, Y2-31)

Choose three dominoes and look at the numbers.



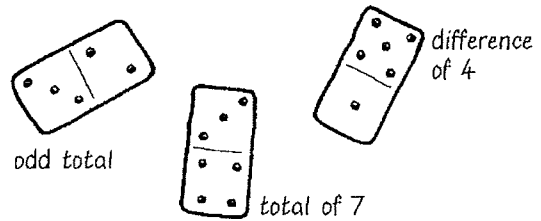
Write the numbers in order, then underneath each one write how many you would need to add to make 10.

0    1    2    3    4    5  
10   9   8   7   6   5

Try again with three different dominoes.

How many would you need to add to make 20?

### Simply sort (Y1-30, 90, Y2-5, 91)



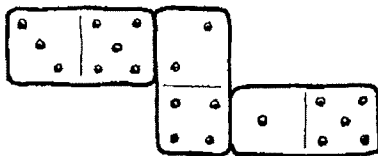
Sort the dominoes in different ways.

- Find all the dominoes with the number 4 on them.
- Find all the ones with an odd or even total.
- Find all the ones with the same totals.
- Find all those with the same difference.
- Find all the doubles.

### Zig-zags (Y1-32, Y2-33)

Use three dominoes to make a zig-zag where the spots in each row add up to 10.

$$3 + 5 + 2 = 10$$



$$4 + 1 + 5 = 10$$

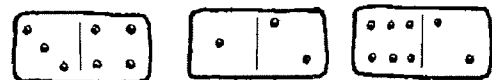
How many different zig-zags can you make?

What do all the spots in each zig-zag add up to?

### Ordering numbers (Y2-9, 15)

Mix up the dominoes and choose three.

Make two 2-digit numbers from each of the dominoes.



34    43      12    21      62    26

Write the six numbers you have made in order, with the smallest first.

12    21    26    34    43    62

Can you write them with the largest first?

### Total two (Y3-33)

Choose two dominoes and add the numbers.



$$4 + 3 + 2 + 3 = 12$$

What is the difference between the total and 20?

$$20 - 12 = 8$$

Try with two different dominoes.

What is the highest total you could get?

What is the lowest?

### Double dominoes (Y3-47)

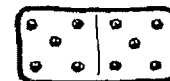
Sort the dominoes and find all the doubles.

Draw the doubles and write a number sentence about each one.



$$3 + 3 = 6$$

or  $3 \times 2 = 6$



$$5 + 5 = 10$$

or  $5 \times 2 = 10$

Draw some more dominoes with 7, 8, 9 or 10 spots on one end. Try writing number sentences for your new dominoes.

### Totals (Y3-93)

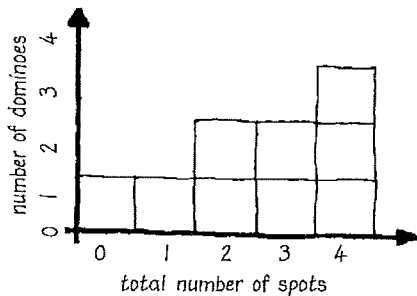
Find the total number of spots on each domino.

Draw a block graph to show how many of each total there are in the set.

What do you notice?

Which total do you get most of?

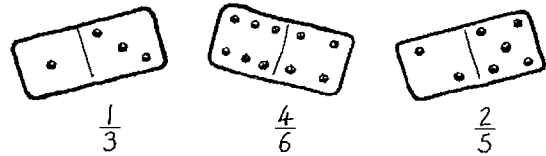
Why?



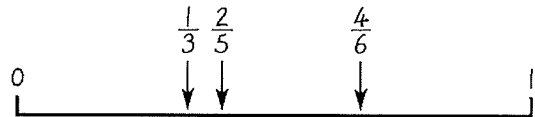
### Fractions number line (Y4-22)

Pick any six dominoes.

Use the number of spots to make vulgar fractions.



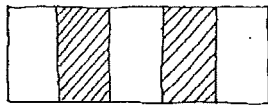
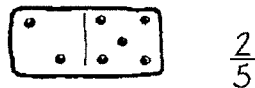
Draw an empty number line from 0 to 1 and mark the place where each of your fractions would go.



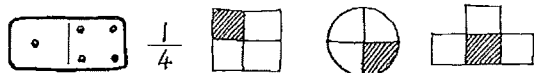
### Fractions drawings (Y4-22)

Take out all the dominoes with a blank. Use all the rest.

Draw a fractions picture for each domino.



Can you think of more than one way of showing some of the fractions?



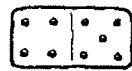
Can you draw the same picture for more than one domino fraction?

### On the spot (Y4-58)

You need a grid like this, and a partner.

18	1	0	15	8	5	30
12	0	36	0	4	16	0
24	10	3	12	0	0	9
2	0	20	4	6	25	6

Take turns to pick a domino and multiply the numbers. Use each domino only once.



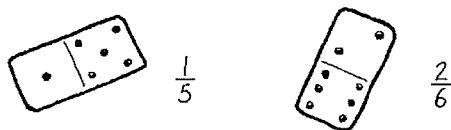
$$4 \times 5 = 20$$

Cross out the answer on the grid, using a different colour for each player.

The winner is the first to cross out four numbers in a line, in any direction.

### Fraction pairs (Y5-23)

Use all the dominoes to make vulgar fractions.



Find pairs that add together to make 1.



$$\frac{2}{3} + \frac{1}{3} = 1$$

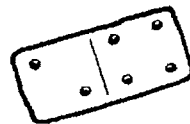
Can you pair all the dominoes in this way?

Or are there some left?

### Race to 500 (Y5-41)

Play this game with a friend.

Mix the dominoes and spread them face down on the table. Take turns to choose a domino, make two 2-digit numbers from it and add the numbers together.



$$24 + 42 = 66$$

The total of the two numbers is your score. Keep adding your scores.

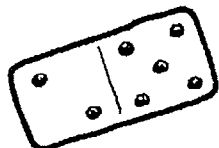
The first person to reach 500 is the winner.

(With the blank dominoes one number will need to be a single-digit one, eg. 20 and 02.)

### Difference game (Y5-41)

(You may wish to remove the dominoes with blanks.) Play this game with a friend.

Mix the dominoes and spread them face down on the table. Take turns to choose a domino, make two 2-digit numbers from it and find the difference between them.



$$52 - 25 = 27$$

The difference between the numbers is your score. Keep adding your scores.

The first player to reach 200 is the winner.

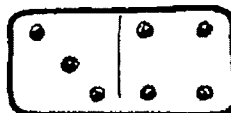
Do you notice anything about the differences?

### Race to 200 (Y5-59)

Play this game with a friend.

Mix the dominoes and spread them face down on the table and take turns to pick one.

Multiply the numbers to get your score.



$$3 \times 4 = 12$$

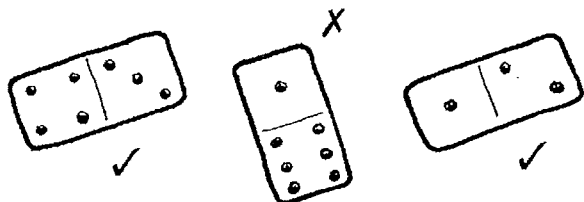
Keep adding your scores.

The first player to reach 200 is the winner.

### A different set? (Y5-79, Y6-79)

Look carefully at the dominoes. How many are in the full set?

How many would there be if only the numbers 0 to 5 were allowed?

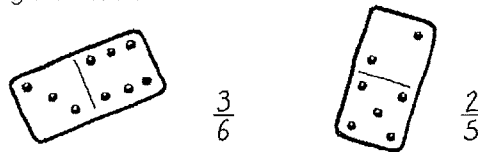


How many would there be with only the numbers 0 to 4? Or only 0 to 3?

How many would be in the set if you could use 7 spots? Or more?

### More fractions (Y6-25)

Pick any domino and use the spots to make a vulgar fraction.



Use this to find a fraction of 60.

$$\frac{3}{6} \text{ of } 60 = 30$$

$$\frac{2}{5} \text{ of } 60 = ?$$

Try using the same dominoes to find fractions of 120. Or fractions of 30.

## Domino sheets - some suggested questions

There are many ways you can ask children to sort their dominoes. Here are a few suggestions to get you started.

- ◆ Can you put down some dominoes on your sheet that have an odd (or even) total?
- ◆ Can you find some dominoes with a total of \_\_\_?
- ◆ Can you find some dominoes with a difference of \_\_\_?
- ◆ Put some dominoes on your sheet whose total is a multiple of 2.
- ◆ Find some dominoes with a total more than (or less than) \_\_\_\_.
- ◆ Find some dominoes whose total is between \_\_\_ and \_\_\_\_.
- ◆ Use the double dominoes. What totals can you make?
- ◆ Use the near double dominoes. What totals can you make?