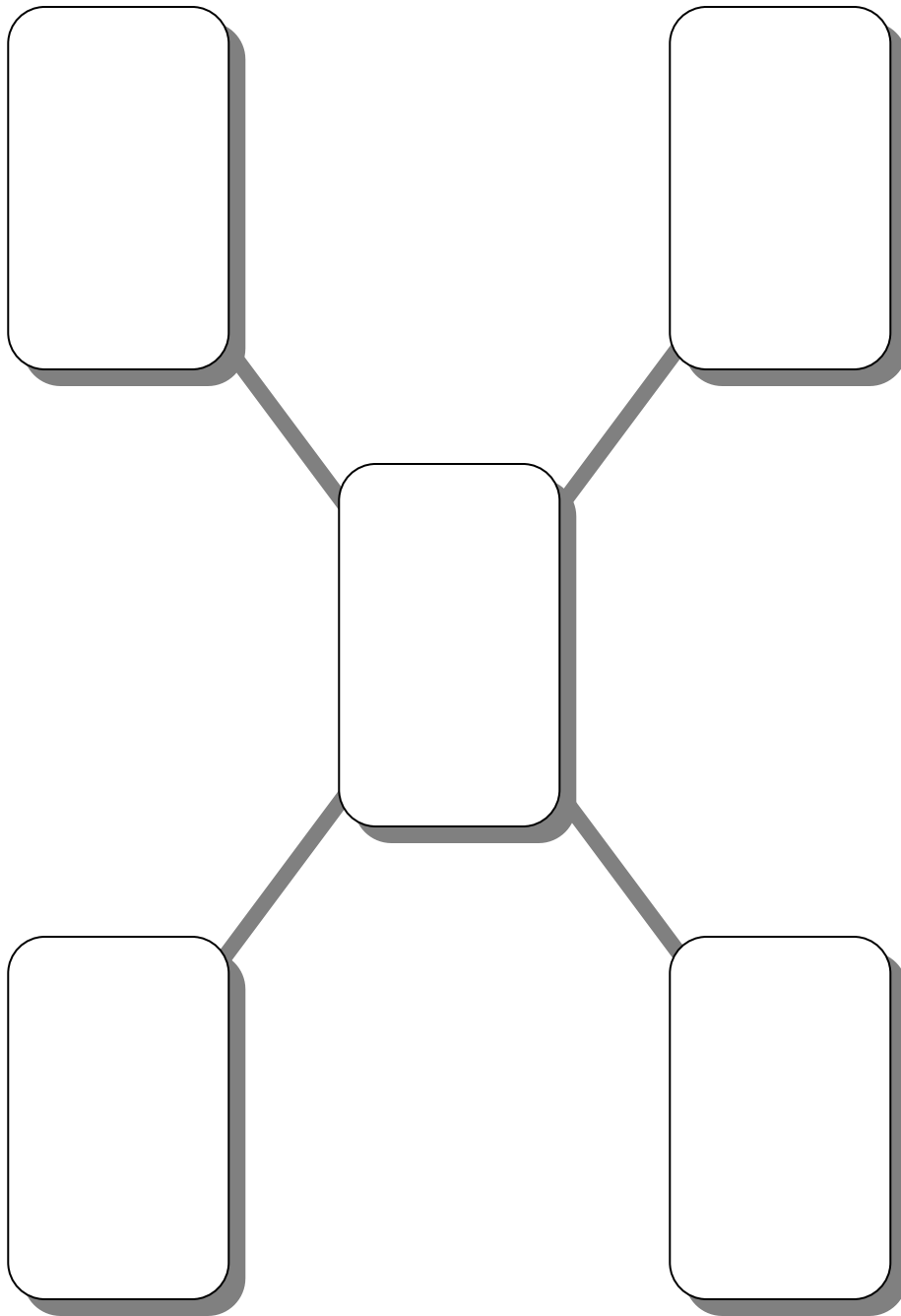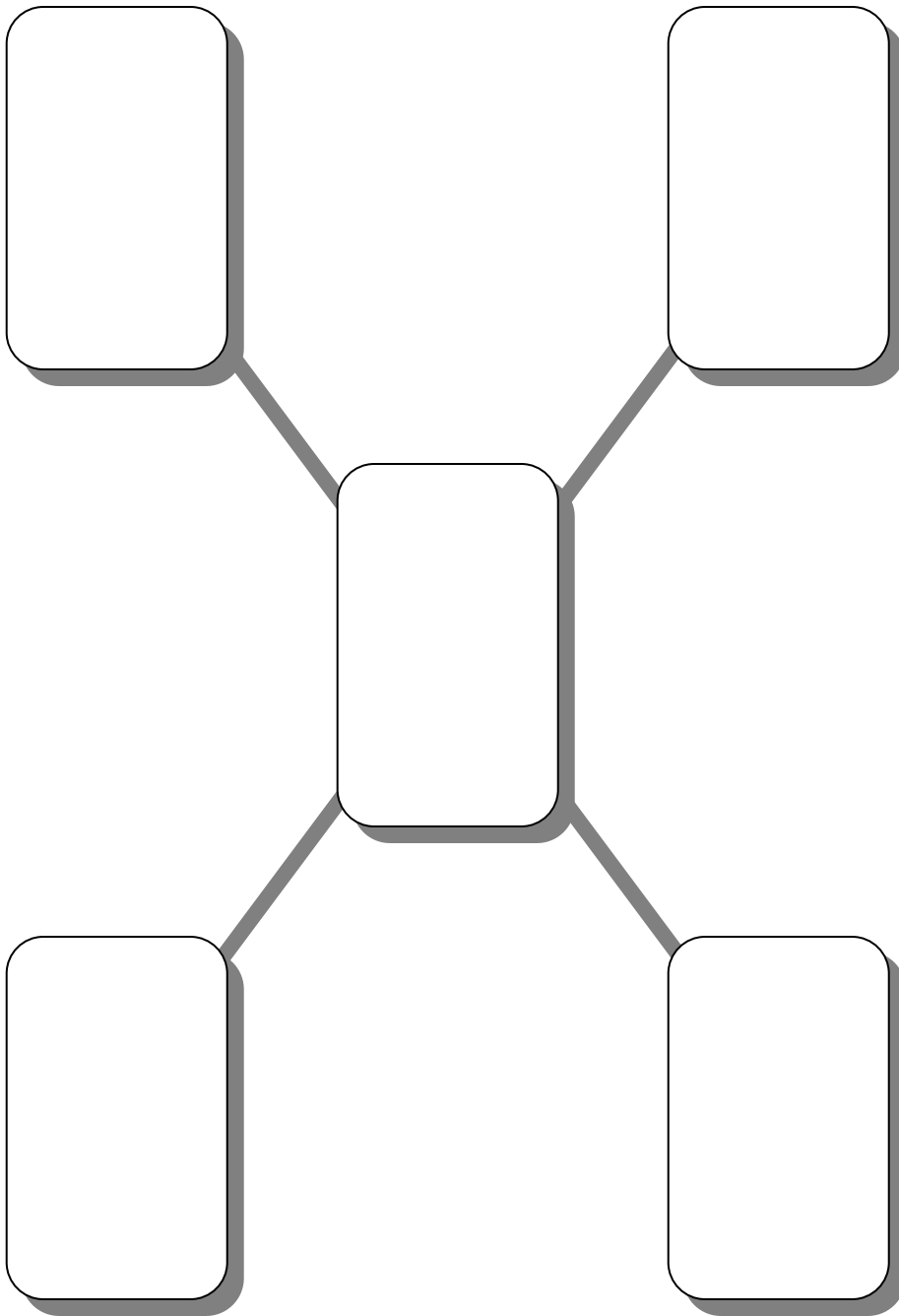# The Domino Cross (1)

Make the dots along each line add to 18.

The Domino Cross (2)

Make the dots along each
line add to the same total.

The Domino Cross (1)

Observe how your child selects their dominoes and which position they fill first. Some children will:

- ➢ use a trial and error strategy
- ➢ realise that starting on all the corners may not be the best starting strategy
- ➢ realise that starting on one pair of corners and finding a matching pair of dominoes for the opposite corners is the most effective strategy.

Encourage your child to:

- ➢ work systematically by matching and laying out all the dominoes with the same totals
- ➢ explore totals made with all even or all odd dominoes in a row.
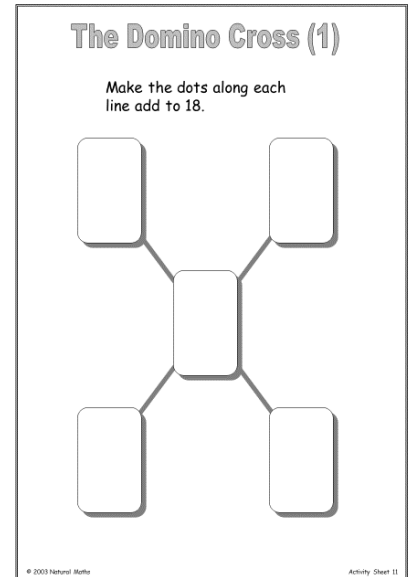
Allow time for your child to investigate, record and prove their answers as well as to ask similar questions of their own.

Challenge your child to find all the possible ways of making eighteen on the cross. Also encourage them to choose a different total that they think would be interesting to investigate and to say why they think that.


The Domino Cross (1)

Make the dots along each line add to 18.

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The Domino Cross (2)

Observe how your child selects the dominoes for this activity. Some children will:

- begin with a trial and error strategy almost as though they haven't done the earlier Domino Cross
- remember the earlier activity and develop a sorting strategy for the dominoes
- eliminate some of the higher and lower dominoes that will not fit the total of eighteen.

Encourage your child to:

- explain which dominoes would work well in the centre position and why
- make equivalent totals with pairs of dominoes and explain how this makes the process of finding totals for eighteen easier
- explain their addition strategies.
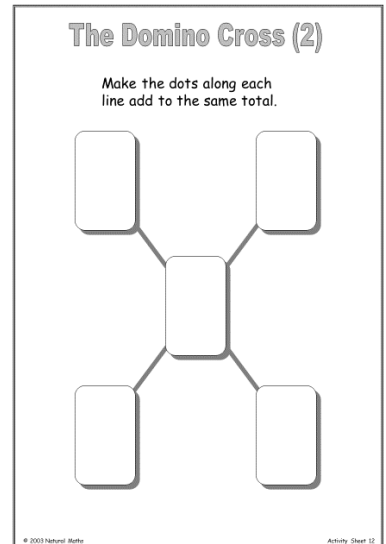
Allow time for your child to investigate, record and prove their answers as well as to ask similar questions of their own.

Challenge your child to find as many different totals that will work as is possible. Also challenge your child to find the lowest and highest totals (which are 4 and 32 respectively) possible and to prove that they have done so.

There is a 'nice' way to show this that uses pairs that add to 6 and swapping 0 with 6, 1 with 5 etc.