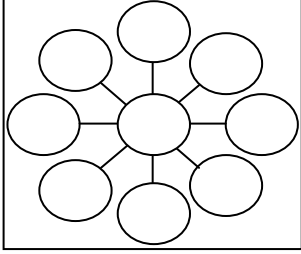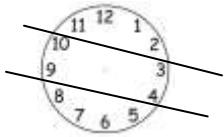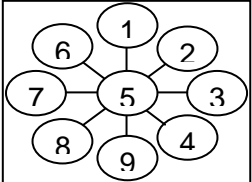# Addition and Subtraction Puzzlers

1. Pet Store

Sally went to the pet store that sold birds and hampsters. The birds had 2 feet and the hampsters had 4.

Someone was buying some animals, and Sally counted 5 heads and 16 feet in the group. How many of each animal was there?

2. Sum Time

Can you draw 2 straight lines through the circle below to make the numbers in each of the 3 sections add to the same number?

3. Eight 8's = 1000

Can you make eight 8's = 1000?

You can put the 8's together however you like—e.g. 8, 88, 888, etc. You can also use + signs to add them.

4. Magic Circle

Can you put the #s 1-9 in the circles below so that each of the lines adds to 15?

5. Twenty-One

Can you circle 6 numbers below that add to 21?

9 9 9

5 5 5

3 3 3

1 1 1

6. Apples

If you take 12 apples from 17 apples, how many do you have?

7. Subtraction Challenge

How would you put these four numbers into two 2-digit numbers so that when you subtract one from the other, the difference is as great as possible?

2,4,6.7

8. 1+1=11

The above equation is not true, of course. Can you make using 8 toothpicks (or crayons, pencils, whatever). The challenge: move 1 toothpick so it equals 130.

9. 2+11-1=12

Let's write the above equation with words: Here is 2+11:

TWOELEVEN

How can you subtract 1 and equal 12?

10. Righting the Equation

I + II + III = 4

Make the above equation using toothpicks, crayons, straws, or whatever. Is the equation correct? No. Can you make it correct by moving just 1 toothpick? You can only operate on the left side of the equals sign.

Solutions 1A

1. 2 birds & 3 hampsters

2.

   11+12+1+2 = 8+7+6+5 = 10+9+3+4=26

3. 888+88+8+8+8=1000

4.

Solutions 1B

5. Turn upside down & circle 3 6's & 3 1's.

6. 12 (You took 12.)

7. 76-24=52. Highest possible # - lowest.

8. Take 1 from the "=" and make the "+" a 4. 141-11

9. Cross out the "O", the "N", & the 2nd "E", and you are left with "TWELVE"!

10. Take 1 from "11" & cross it over the middle 1 in 111 to yield: 1+1+1+1=4

Split students into 5 groups, giving each a different puzzler above to solve. Circulate, helping as needed. Each group presents & teaches theirs to the class. Repeat with next 5 puzzlers.