MATHS – YEAR 5

Week 2

WHITE ROSE MATHS

Outline for this week:

Monday: Adding decimals (starter – inverse with addition calculations)

Tuesday: Subtracting decimals (starter – mixed inverse)

Wednesday: Complements to 1 (starter – missing number shape)

Thursday: Adding decimals - crossing the whole (starter – word problem)

Friday: Friday Maths Challenge (Q1-5 are most suitable for Year 5s but please feel free to try more than this if you feel like you want a challenge) *There will be no starter today.*

MONDAY: STARTER (INVERSE)

Mistake 1

Model:

2564 + _____ = 8675

addend addend sum

2564 + 11, 239 = 8675

Yep! If I add these two addends together, I do not get 8675 as the sum.
Therefore, to solve the missing number calculation, we must do the inverse - subtraction.
See the next slide.

What I notice:
- The calculation is addition.
- We already have our 'sum' (total)
- One of the addends is missing

What would happen if I added 2564 and 8675?

2564 + 8675 = 11239

Now let's put that back in the calculation. What do you notice?

MONDAY: STARTER (INVERSE)

Mistake 2

Model:

2564 + _____ = 8675

addend addend sum

2564 - 8675 = _____

What I notice:
- The calculation is addition.
- We already have our 'sum' (total)
- One of the addends is missing

What would happen if did this:

2564 - 8675 = ?

Well, I'm trying to subtract more than I started with. Imagine you baked 2564 cakes, and your friend tried to take 8675 cakes from you. They wouldn't physically be able to take this as it's more than you baked.

MONDAY: STARTER (INVERSE)

Model:

2564 + _____ = 8675

addend addend sum

8675 - 2564 = 6111

_____ + 2564 = 8675

addend addend sum

8675 - 2564 = 6111

So, to work out any missing addend, I need to put the sum at the start of my calculation and subtract the other addend.

This would be true whatever the position of the addend.

TRY THESE:

1) 2567 + _____ = 8745

2) _____ + 9876 = 14,209

3) 792 = _____ + 284

TRY THESE: ANSWERS

1) 2567 + 6178 = 8745

2) 4333 + 9876 = 14,209

3) 792 = 508 + 284

TUESDAY: STARTER (INVERSE/MISSING NUMBER QUESTIONS)

NOW USE YOUR KNOWLEDGE ON INVERSE TO ANSWER THESE QUESTIONS

1) 6542 - _____ = 2875

2) 7626 + _____ = 12,432

3) _____ + 3672 = 9347

4) 28762 - _____ = 9438

5) _____ - 6704 = 14,564

CHALLENGE: 705 = 952 - _____

TUESDAY: STARTER (INVERSE/MISSING NUMBER QUESTIONS)

ANSWERS

1) 6542 – 3667 = 2875

2) 7626 + 4806 = 12,432

3) 5675 + 3672 = 9347

4) 28762 – 19,324 = 9438

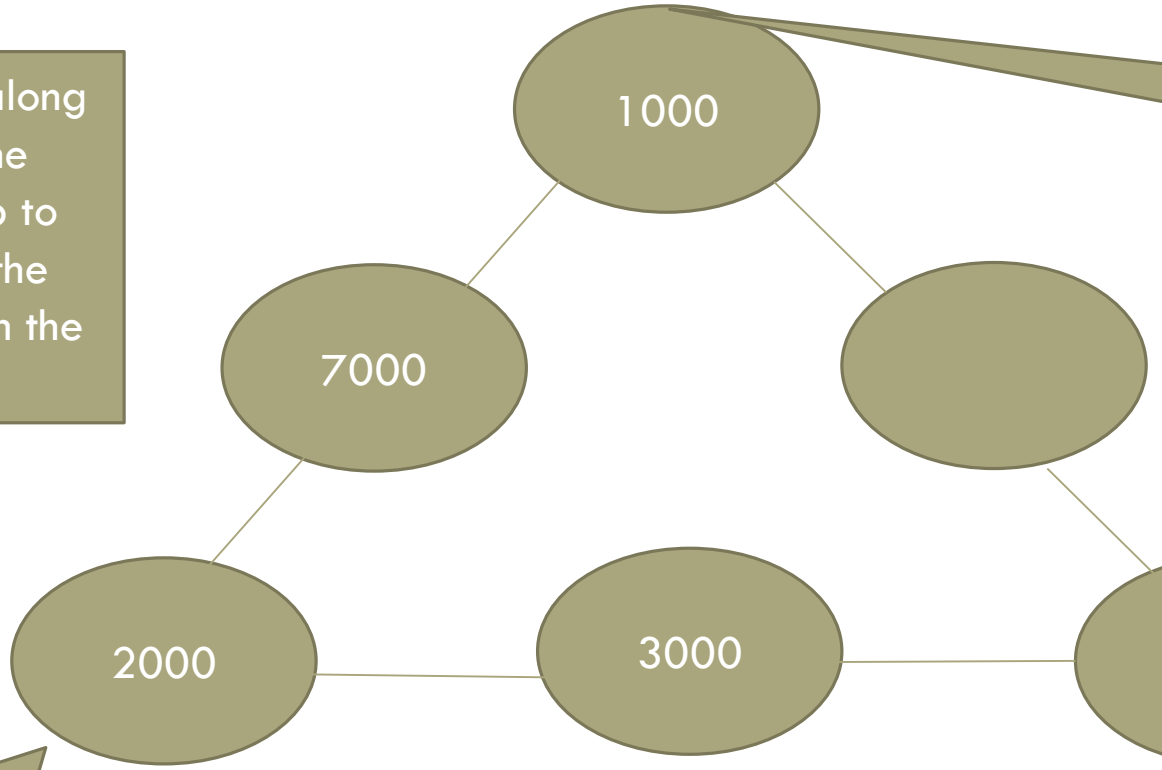
5) 21,268 - 6704 = 14,564

CHALLENGE: 705 = 952 - 247

This question is exactly like question 4, but just presented in a different way.

WEDNESDAY STARTER: MISSING NUMBER SHAPE

The three circles along each side of the triangle adds up to 10,000. Write the missing numbers in the circles.



Lastly, I'll work out this side, now I know that the bottom missing circle is 5000.

5000+ 1000+ 4000 = 10,000

I'll work out this one next as I only have one missing number here.

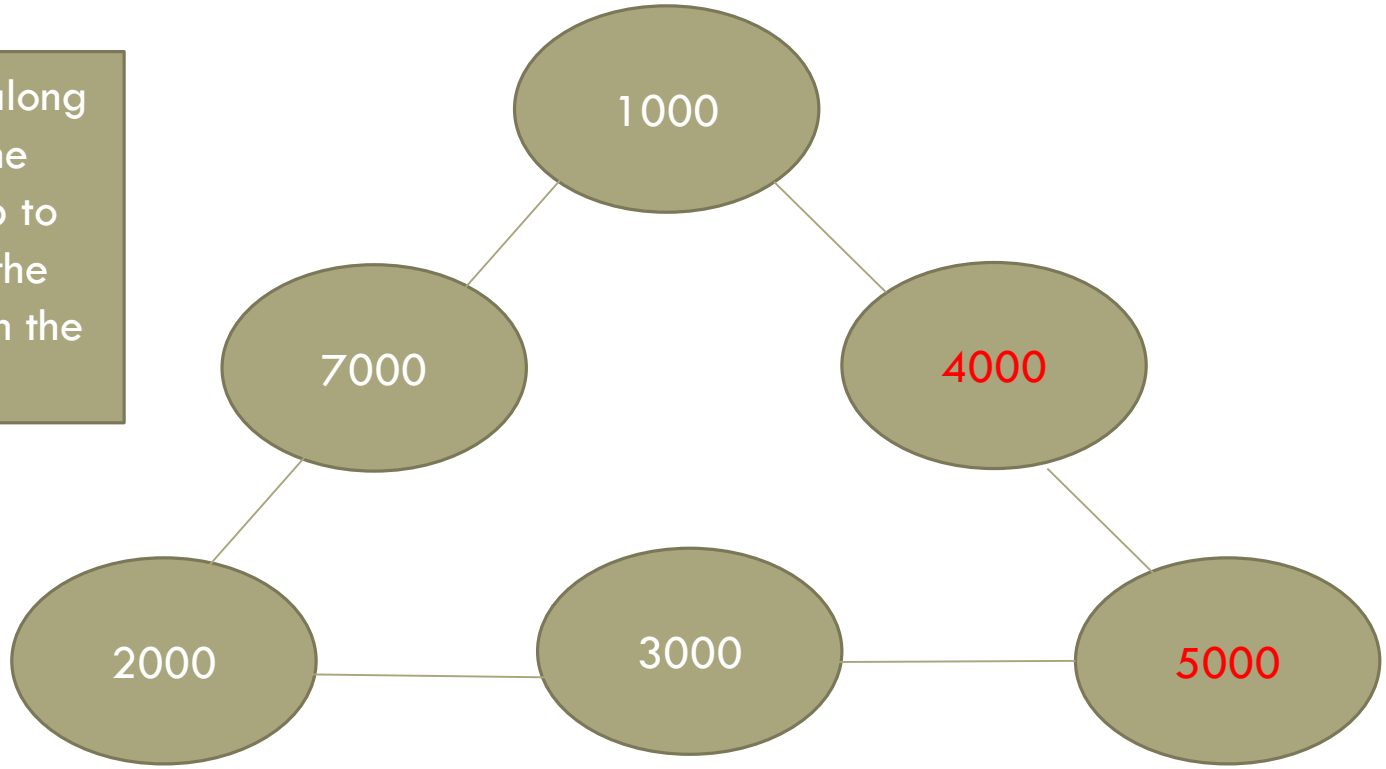
3000+ 2000 + 5000 = 10,000

These three circles are along one side so must add up to 10,000

1000 + 7000 + 2000 = 10,000

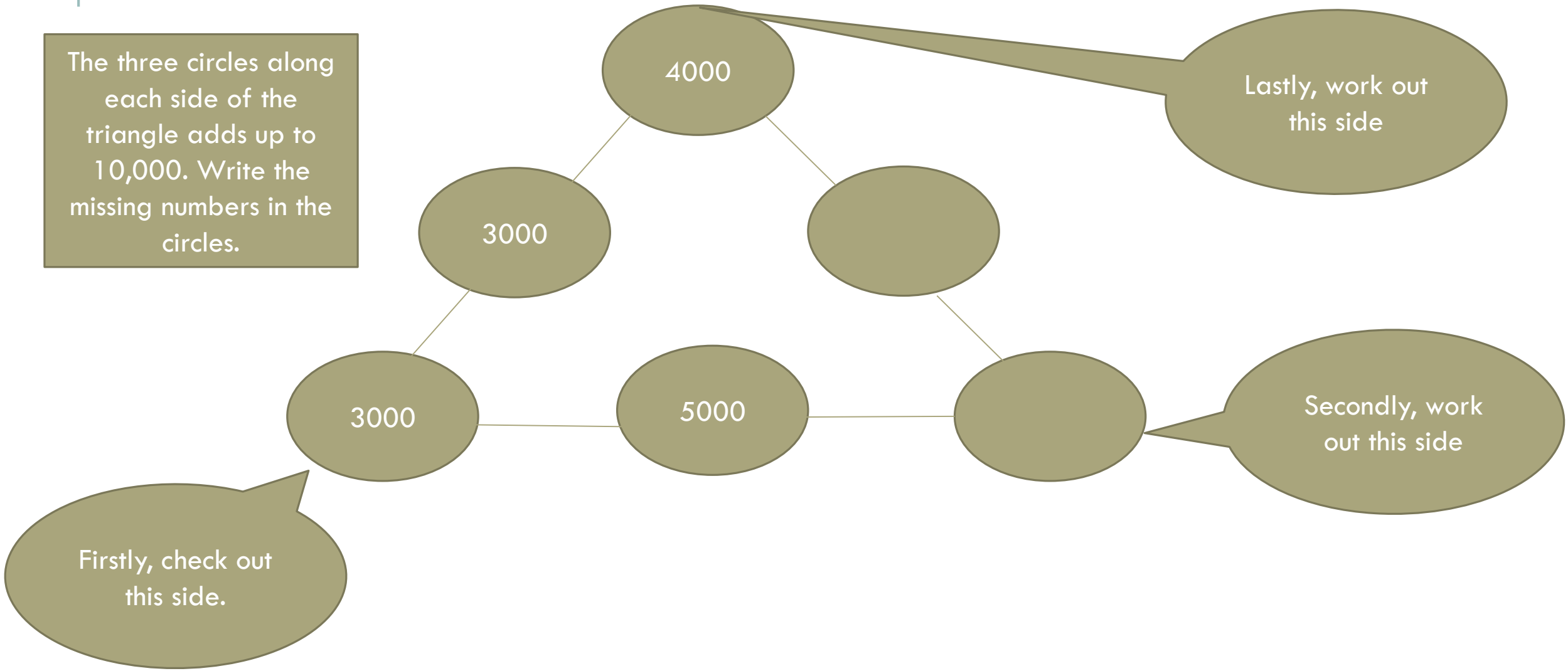
WEDNESDAY STARTER: MISSING NUMBER SHAPE

The three circles along each side of the triangle adds up to 10,000. Write the missing numbers in the circles.



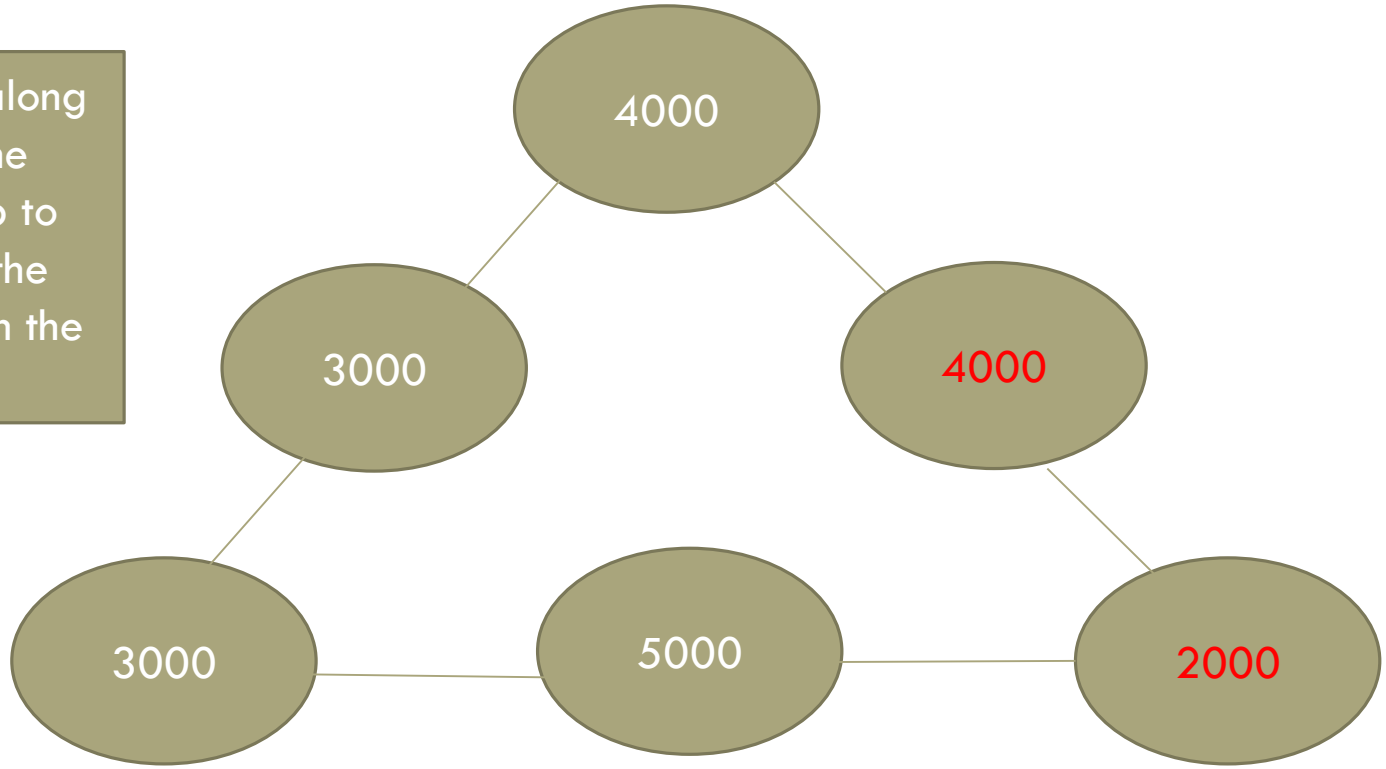
WEDNESDAY STARTER: NOW YOU TRY

The three circles along each side of the triangle adds up to 10,000. Write the missing numbers in the circles.



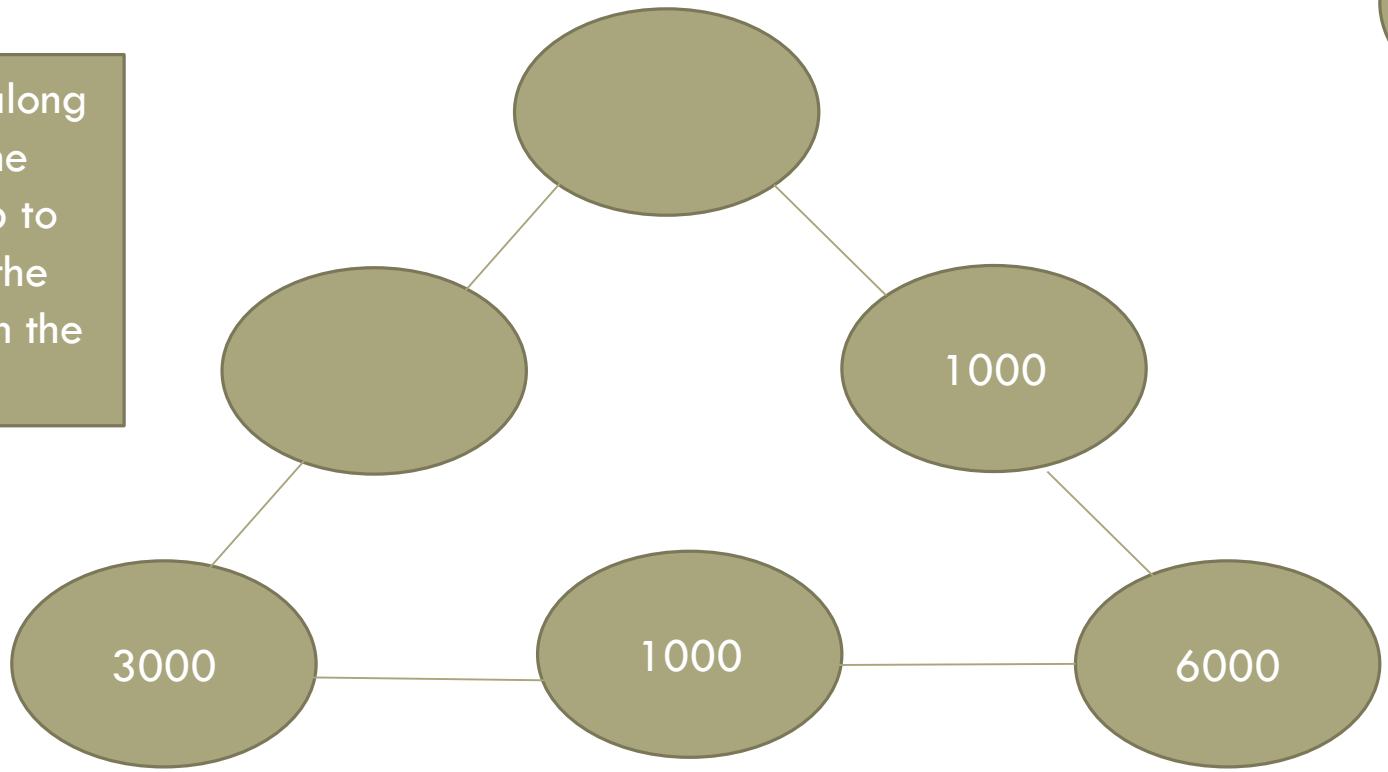
WEDNESDAY STARTER: NOW YOU TRY

The three circles along each side of the triangle adds up to 10,000. Write the missing numbers in the circles.



WEDNESDAY STARTER: NOW YOU TRY

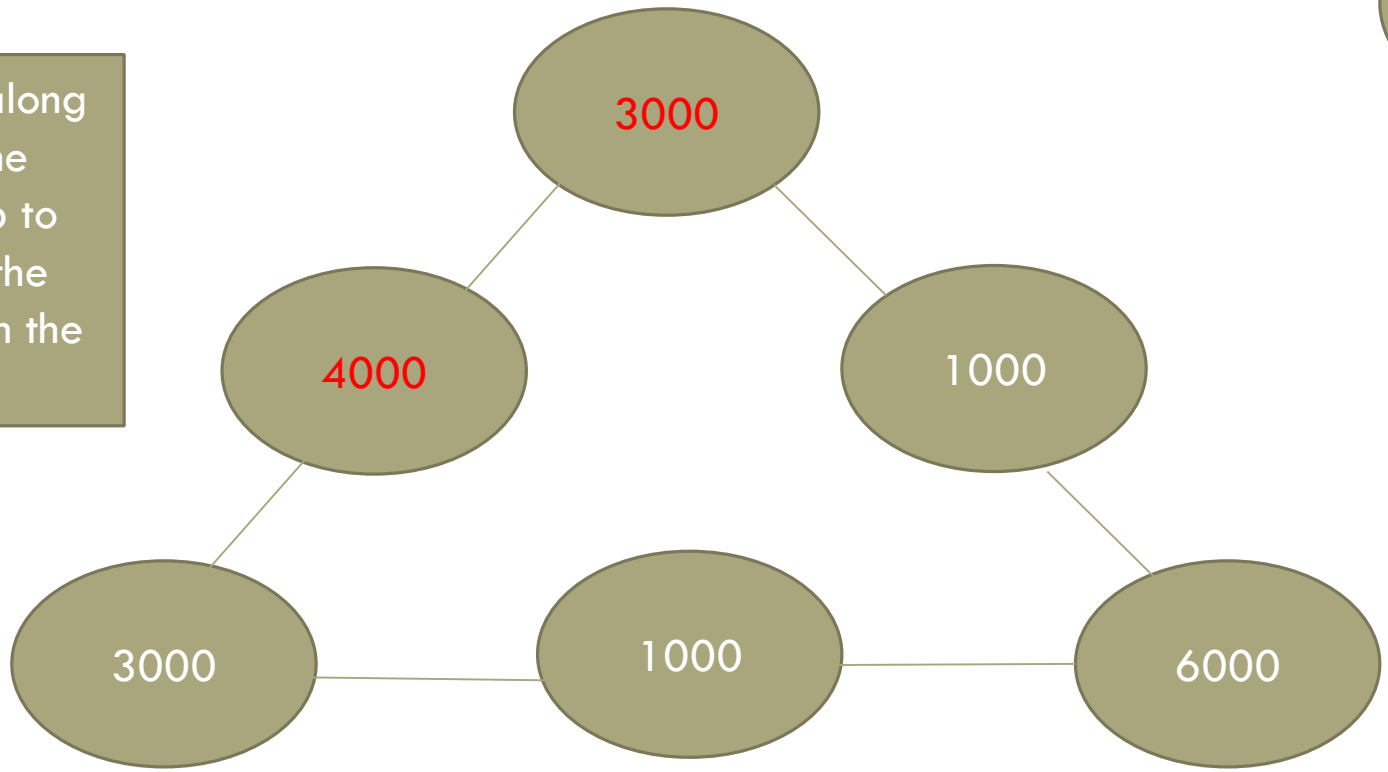
The three circles along each side of the triangle adds up to 10,000. Write the missing numbers in the circles.



Decide yourself, which order to work out the sides in for this one.

WEDNESDAY STARTER: NOW YOU TRY

The three circles along each side of the triangle adds up to 10,000. Write the missing numbers in the circles.

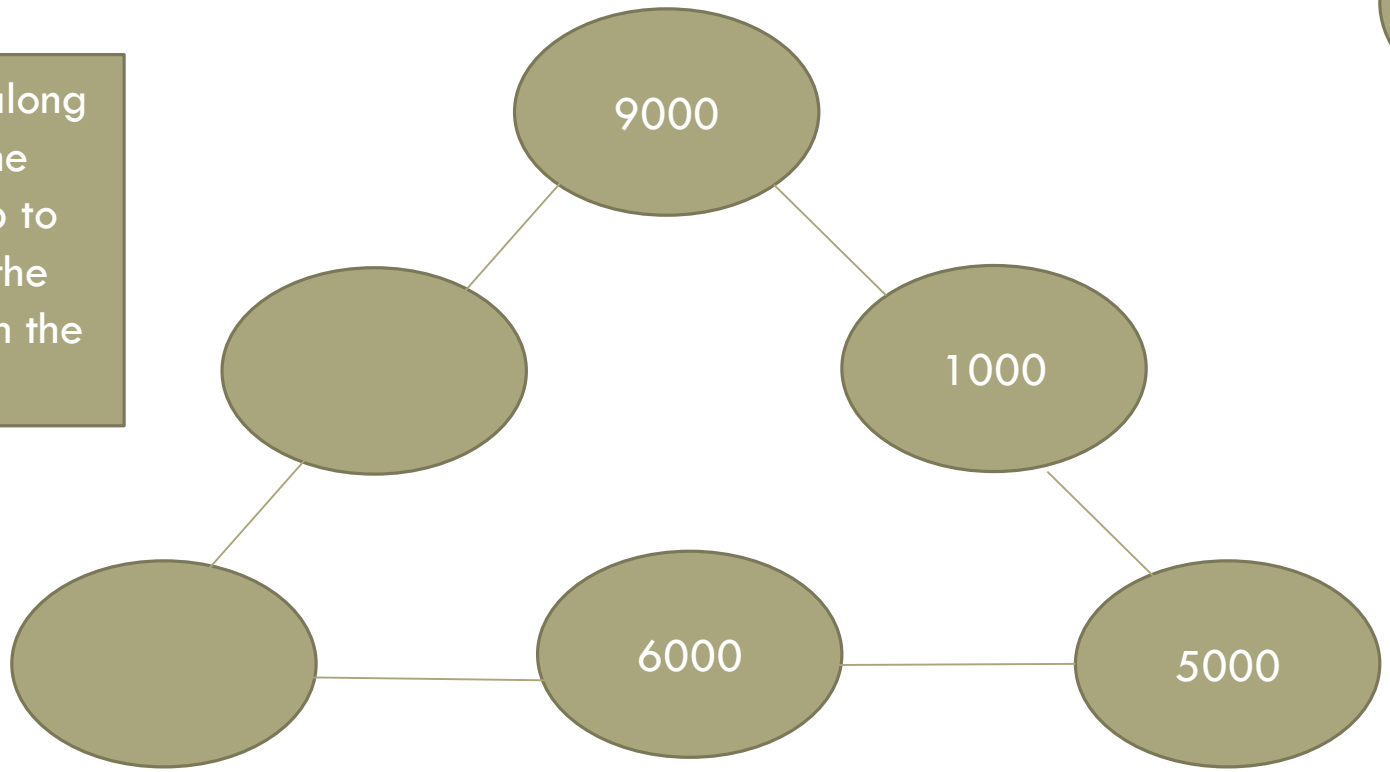


Decide yourself, which order to work out the sides in for this one.

WEDNESDAY STARTER: NOW YOU TRY

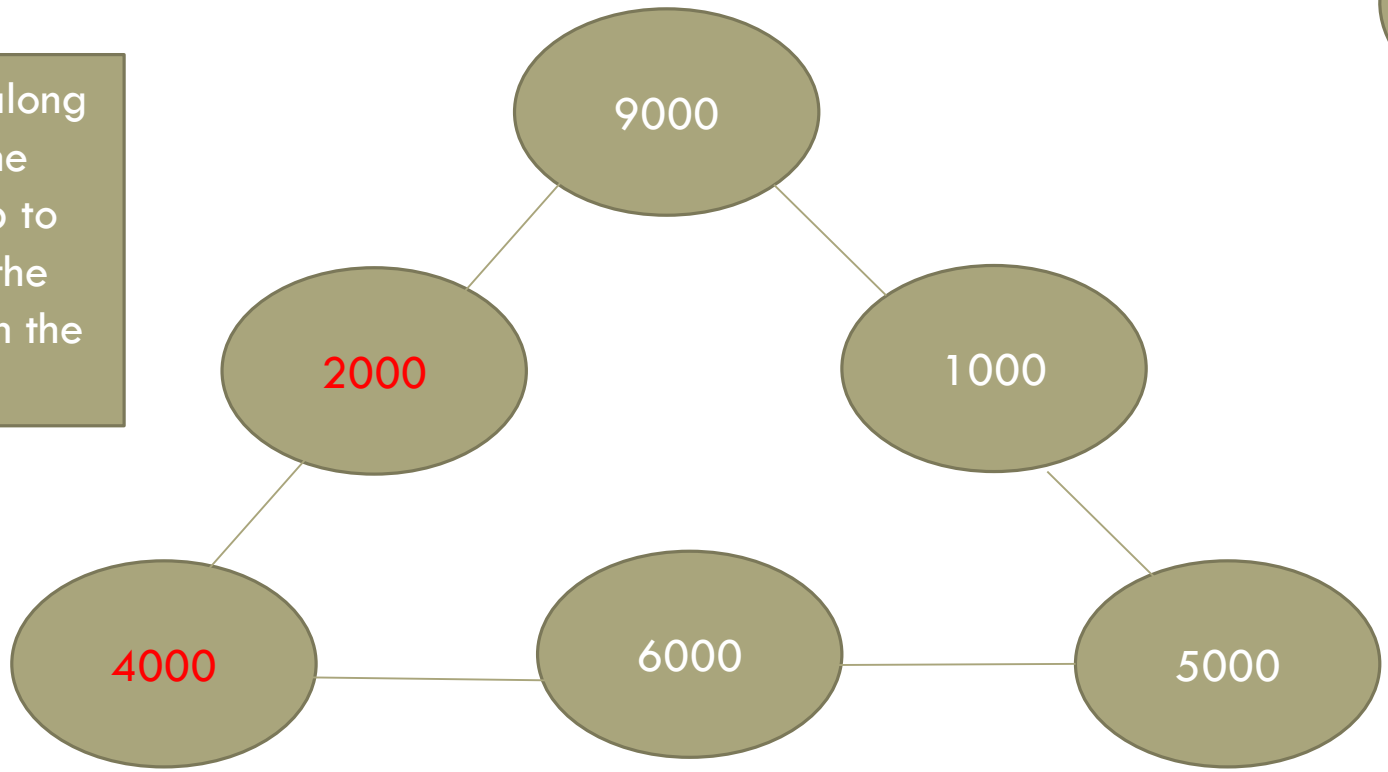
Read the question really carefully!

The three circles along each side of the triangle adds up to 15,000. Write the missing numbers in the circles.



WEDNESDAY STARTER: NOW YOU TRY

The three circles along each side of the triangle adds up to 15,000. Write the missing numbers in the circles.



Read the question really carefully!

THURSDAY STARTER: WORD PROBLEMS

At this point of the problem there are 11 bees in the hive.

There were 6 bees in a beehive.

5 flew **into** the hive and 7 bees fly **out.**

How many bees are in the beehive now?

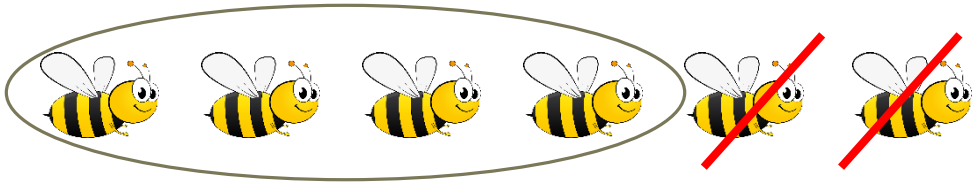
How would you show, using the pictures, the bees that flew out?

See next slide…

I have crossed out the seven that flew off.

THURSDAY STARTER: WORD PROBLEMS

There were 6 bees in a beehive.



5 flew **into** the hive and 7 bees fly **out.**

How many bees are in the beehive now?

That leaves us with 4 bees in the beehive now.

THURSDAY STARTER: WORD PROBLEMS

There were 21 bees in a beehive.

16 flew **into** the hive and 18 bees fly **out.**

How many bees are in the beehive now?

YOU MUST:
Use objects to represent the bees…even if you can do the calculation already!

THURSDAY STARTER: WORD PROBLEMS (ANSWER)

There were 21 bees in a beehive.

21 + 16 (flew in) = 37 bees

16 flew **into** the hive and 18 bees fly **out.**

37 – 18 (flew out) = 19 bees

How many bees are in the beehive now?

Answer in a sentence: 19 bees were left in the hive.

THURSDAY STARTER: NOW YOU TRY

1) There were 471 bees in a hive.

38 bees **fly into** the hive and 82 bees **fly out.**
How many bees are in the hive now?

2) There were 628 bees in a hive.

275 bees **fly into** the hive and 106 bees **fly out.**
How many bees are in the hive now?

3) There were 328 cupcakes in a shop.

That morning, the shop had a delivery of 175 cakes. However, 206 cakes were sold that day.
How many cakes were left in the shop at the end of the day?

THURSDAY STARTER: NOW YOU TRY (ANSWERS)

1) There were 471 bees in a hive.

38 bees **fly into** the hive and 82 bees **fly out.**
How many bees are in the hive now? There were 427 bees left in the hive.

2) There were 628 bees in a hive.

275 bees **fly into** the hive and 106 bees **fly out.**
How many bees are in the hive now? There were 797 bees left in the hive.

3) There were 328 cupcakes in a shop.

That morning, the shop had a delivery of 175 cakes. However, 206 cakes were sold that day.
How many cakes were left in the shop at the end of the day? There were 297 cakes left in the shop at the end of the day.