Year 4 Week 11 – Problem Solving Investigation

Monday



Tell the teacher

1. 4521 + 50 = 4571 ✓
2. 6872 + 60 = 6933 🗶
3. 4213 – 300 = 3813 ✓
4. 5794 – 400 = 5394 ✓
5. 6521 + 2000 = 8521 ✓
6. 8432 – 7 = 8425 ✓

7/9

Well done. Just try question 2 again.

1. A teacher has marked these three children’s pieces of work.

She gives some questions 1 point and more difficult questions 2 points.

Can you work out her scoring system?

1. 4521 + 50 = 4571 ✓
2. 6872 + 60 = 6932 ✓
3. 4213 – 300 = 3813 🗶
4. 5794 – 400 = 5394 ✓
5. 6521 + 2000 = 8521 ✓
6. 8432 – 7 = 8435 🗶

5/9

Good try, let‛s work on questions 3 and 6 together.

1. 4521 + 50 = 4571 ✓
2. 6872 + 60 = 6932 ✓
3. 4213 – 300 = 3913 ✓
4. 5794 – 400 = 5394 ✓
5. 6521 + 2000 = 6721 🗶
6. 8432 – 7 = 8425 ✓

8/9

Just a silly little mistake! Can you see what you did?

1. Now write your own six questions with a total possible score of 10.
2. How many points do you think the calculation 4537 + 403 should earn? What about 4537 + 603? And 4537 + 608?
3. Make up your own calculations which you think should score 3 points, 4 points or even 5 points!

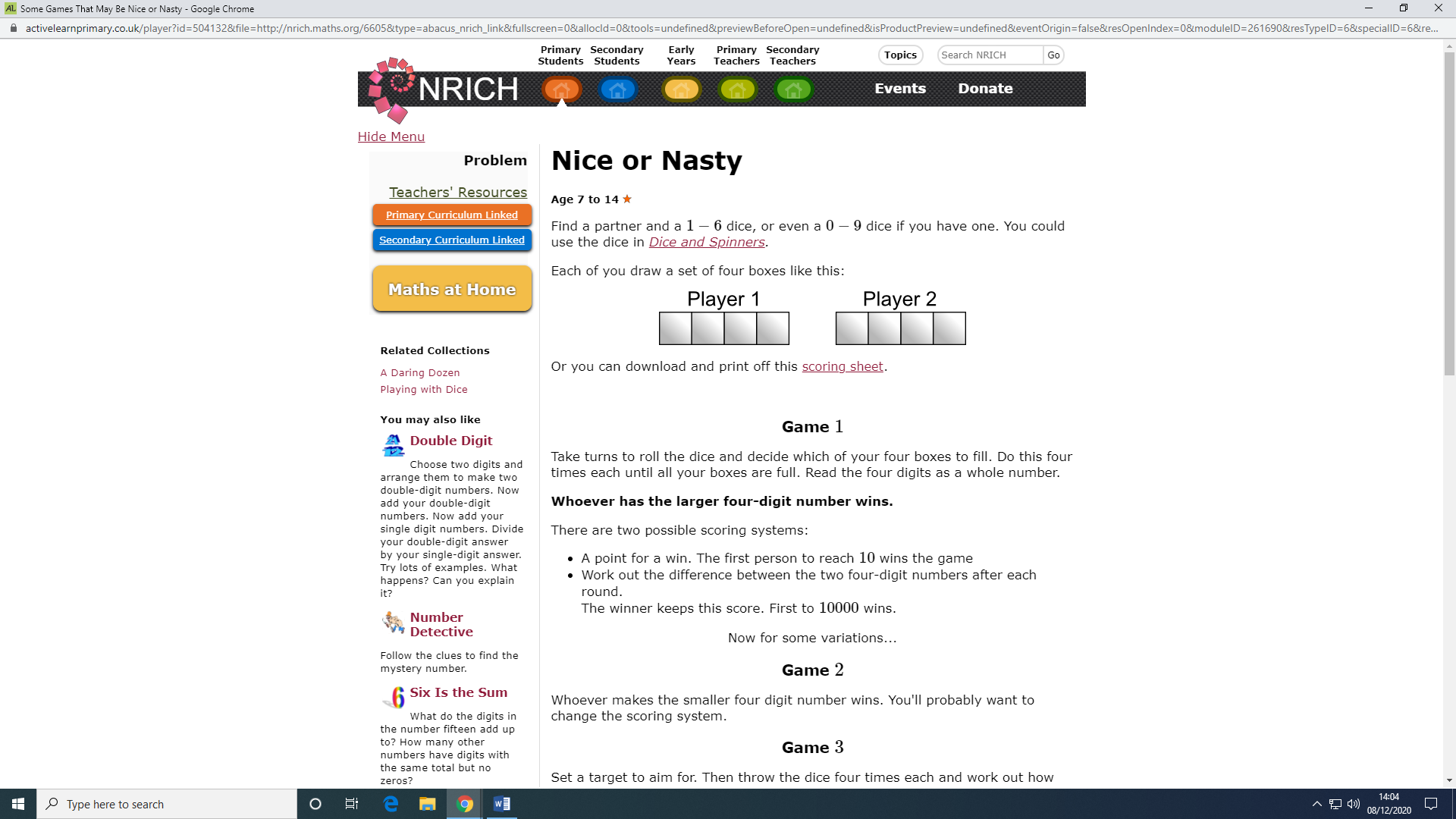


Tell the teacher

Tuesday

Nice or Nasty

Tuesday

Age 7 to 14  

Find a partner (an adult at home, an older sibling or a friend on Teams!), or even a 0−9 dice if you have one. You could use the dice in [*Dice and Spinners*](https://nrich.maths.org/6717)*.*

Each of you draw a set of four boxes like this:



Or you can download and print off this [scoring sheet](https://nrich.maths.org/content/id/6605/Nice%20or%20Nasty%20Score.pdf).

Blue

Set a target to aim for. Then throw the dice four times each and work out how far each of you is from the target number. Whoever is the closer wins.

There are two possible scoring systems:

A point for a win. The first person to reach 10 wins the game

Work out the difference between the two four-digit numbers and the target number after each round. Keep a running total. First to 10000 loses.

Wednesday

B- WALT; multiply 2 and 3-digit numbers by 4, 5 and 20 and divide numbers by 4 using mental methods

Steps to success

Read the calculation carefully

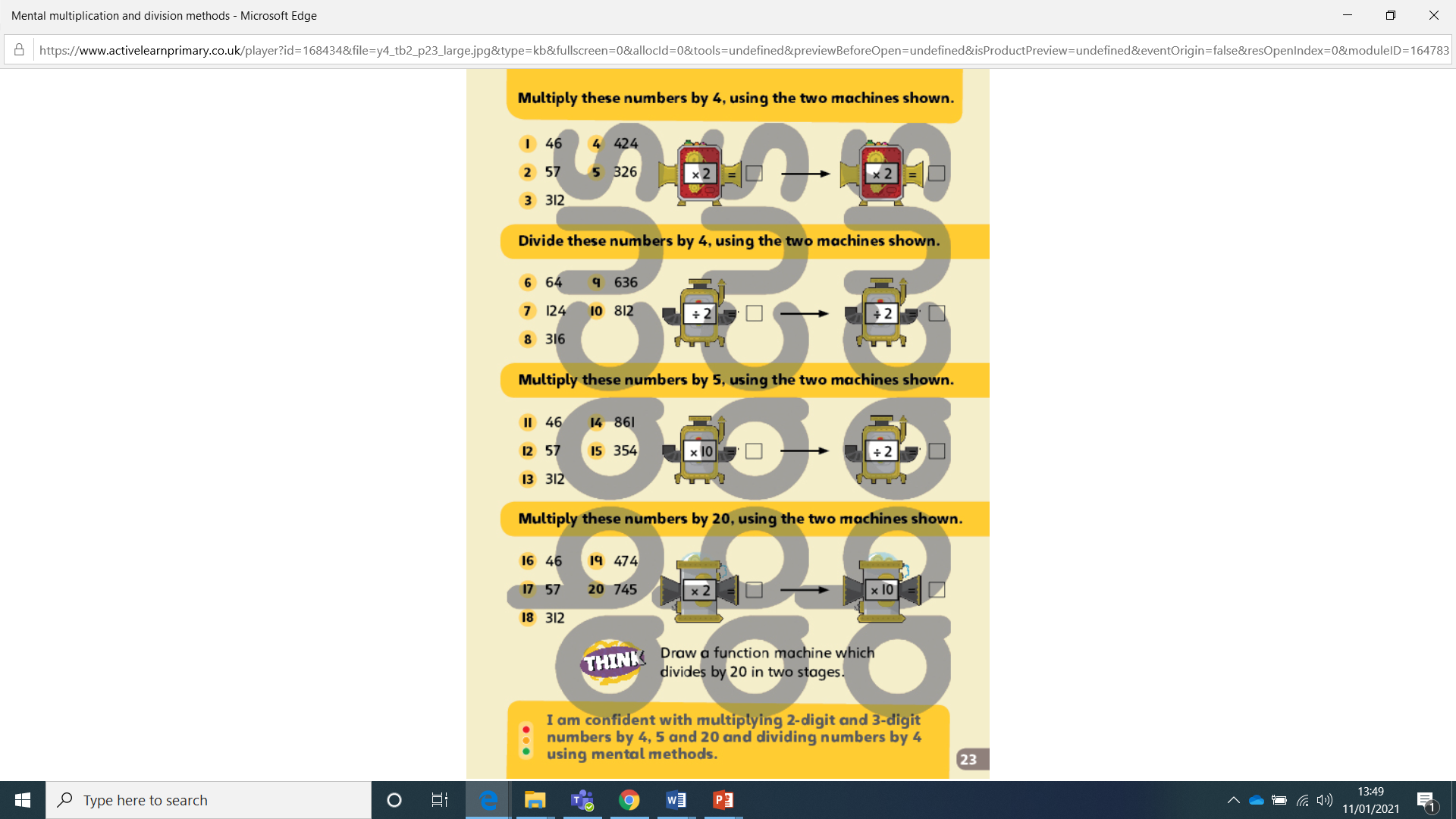
Use your times-tables knowledge

Use mental strategies to make larger calculations easier

X4 =x2x2

X20=x2x10

X5=x10÷2



Friday

B-WALT; find fractions of numbers

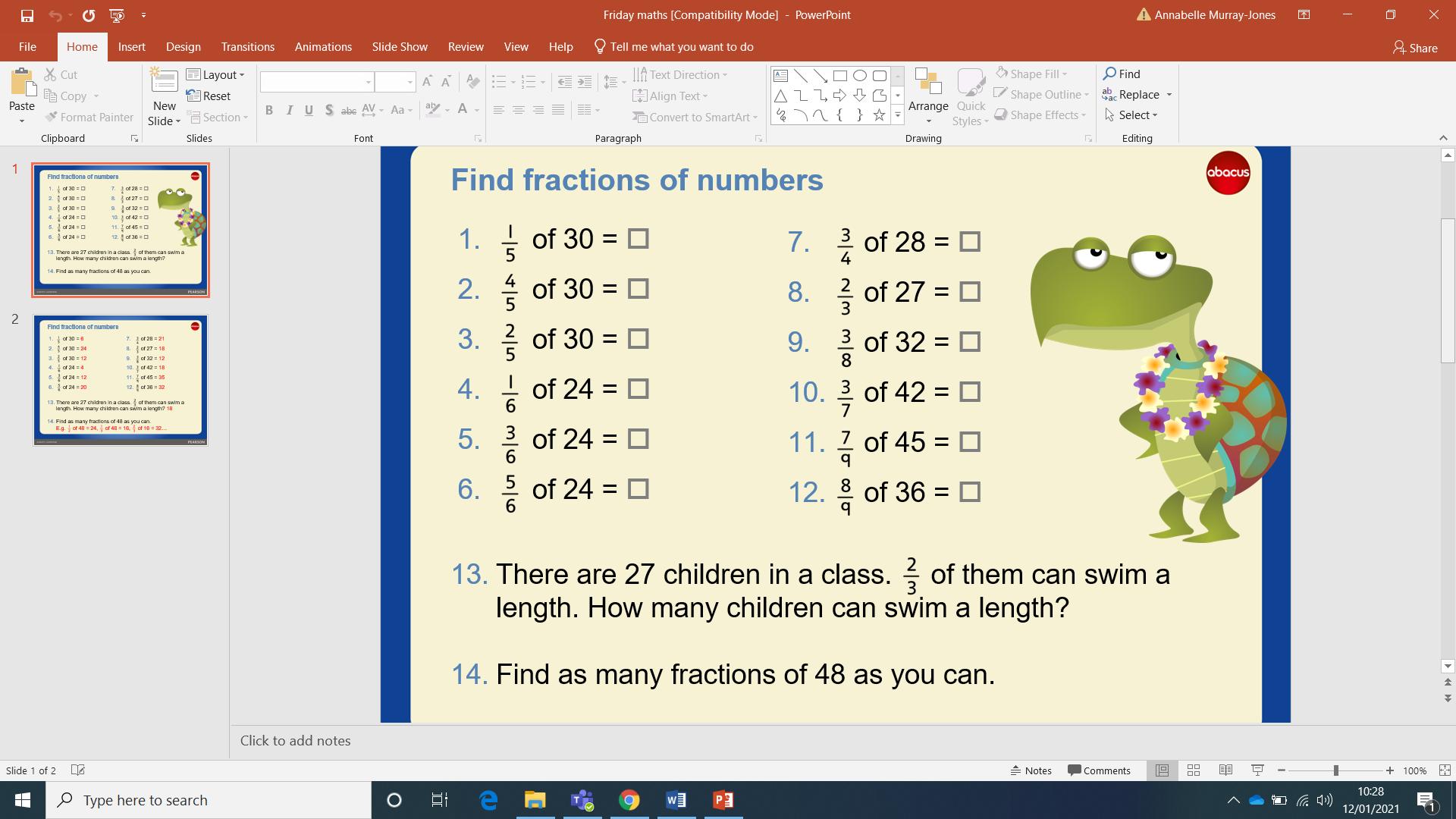
Steps to success

Copy the calculation carefully

Split your number into ? parts (the number on the bottom of the fraction- denominator)

Keep ? parts (the number on the top of the fraction- numerator)

Show your answer clearly



Friday- reasoning

