

Homework

For 20th September

Nice and Nasty

Here are a selection of games; some of which we have played in class. In each game you and your opponent roll dice to create a four digit number. Choose from these games and play them with someone from home. I want you to challenge yourself so adapt the games by using more digits or by adapting the scoring system.

You can use the interactive spinners on this website if you wish:

<http://nrich.maths.org/6717>

Game 1

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Take turns to roll the dice and decide which of your four boxes to fill. Do this four times each until all your boxes are full. Read the four digits as a whole number.

Whoever has the larger four-digit number 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 after each round. The winner keeps this score. First to 10000 wins.

Now for some variations...

Game 2

Whoever makes the smaller four digit number wins. You'll probably want to change the scoring system.

Game 3

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.

Game 4

This game introduces a decimal point. The decimal point will take up one of the boxes so this time the dice only needs to be thrown three times by each player. The winner is the one closer to the target. Choose a target.

Two possible versions:

- each player decides in advance where they want to put the decimal point before taking turns to throw the dice
- each player throws the dice three times and **then** decides where to place the digits and the decimal point.

Again, two different scoring systems are possible.

Game 5

This is the nasty version!

Play any of the games above. This time you can choose to keep your number and put it in one of your boxes, **OR** give it to your partner and tell them which box to put it in. You might lose a friend this way! It's really important to take turns to start each round if this game is going to be fair.

This becomes even nastier when you play the games above with more than two people.



Once you have played a game, write down your strategies. What did you know that helped you? Did you change your strategies depending on the numbers you or your partner got? Why did you decide to put the digits where you did? If you lost, what could you have done differently?

Comments

Date set: Friday 15th September 2016 Date of test: Wednesday 20th September 2016

My score today out of 10	Mr Board's Star Words: 
The words I still need to learn I have circled below:	

The spelling pattern for this week is:

Words ending in '-cious'

Common examples of words with this spelling pattern include:

vicious
gracious
spacious
malicious
precious
conscious
delicious
suspicious
atrocious
ferocious

What words can you find with this spelling pattern? If you can find some over the week – come and write them on our Spelling Spot in the classroom for others to see and learn from. Remember, if the root word ends in '-ce' then it will usually be '-cious.'

Star words will be:

excellent
soldier

Literacy

Over the next few weeks, we will be learning about biographies. Choose a member of your family to write a biography about. This week, I would like you to think about what people would be interested to learn about that person and compose questions you could ask him or her. I would then like you to conduct an interview with them and make notes for your biography.

In the following weeks you will need to write the biography, so make sure you have plenty of interesting information.