

Fraction frenzy

Fetch a pack of playing cards, shuffle them thoroughly and select any number of the cards at random.



Turn the playing cards over and note down any groups you could form with them. You could use colour, odd cards, numbers or face cards.



Now, write fractions for each of the different groups you've identified.





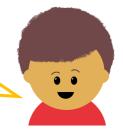
Let's do this!



What will the numerator represent?

How about the denominator?

Can you use the highest common factor to simplify the fractions?



Challenge

Can you convert any fractions into equivalent decimals or percentages?

Remember... when converting, you may need to use short or long division.







Gold digger

Each player takes it in turns to place their gold bars (2), silver (5) and mines (8) anywhere on their four quadrants. (Do not let your competitor see).







Each player names a coordinate to dig, taking each go in turn. If you strike lucky, by hitting a gold or silver bar, take another go.



Once all of the assets (metals) of one player have been found the game is over.

Scoring

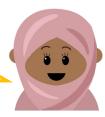
In this game, the winner is not necessarily the person who locates the most golden or silver bars. Each complete gold extraction is worth 3 points, each silver extraction is worth 1 point and mine hits are worth -2 points.

Key questions



What order are coordinates given in? Link your response to the axes.

Compare the quadrants – which one held the most of your competitor's assets or mines?





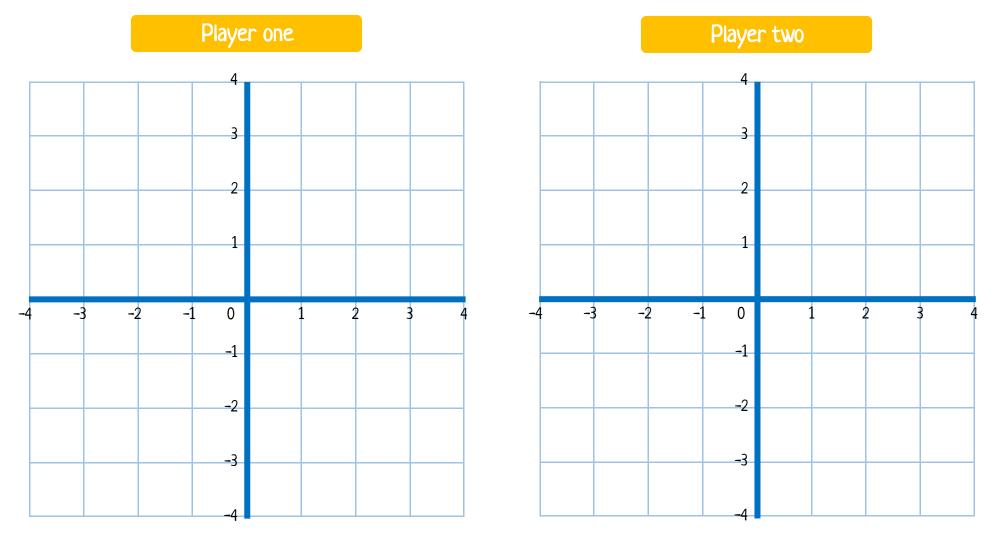
What decimal of mines did you strike?

What fractions of your digs hit an asset?













Population facts

Looking at data using large numbers can be fascinating. Follow this link and study the information about the world's populations.





Let's do this!



Some countries have populations with 6, 7 and 8 digits. Write a selection of them in words.

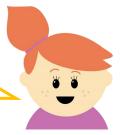


Which countries' populations round to 9 million to the nearest million?

What is the difference between the largest populations in each continent? (Exclude Antarctica)



How does today's population compare with the year you or your parents were born in?



Challenge

Choose the data that interests you the most and create a line graph to illustrate your findings. Use the squared paper provided.





