GO FISH

1 Vocabulary

To play cards, a game of cards, pack (UK), deck (US), suit (Spades ♠, Hearts ♥, Diamonds ♦, Clubs ♣), rank (Ace, King, Queen, Jack, 10-2), two of Hearts, Jack of Spades, joker, to shuffle, to deal, hand, dealer, to draw, draw pile.

2 Listen to the podcast and fill in the blanks

To get started, you'll need 2 to 6 _____ the game is best when played with 3 to 6 people. You'll also need a standard _____ with _____ . The aim of *Go Fish* is to collect more sets of 4 cards with the same rank than your _____ . Rank simply means cards with a similar type. If you're playing with 2 people, start by _____ 7 cards to each person; if you're playing with 3 to 6 people, 5 cards are dealt to each person. The leftover cards are set face down. This will create a _____ for the players to draw from. Select a person to go first. This person can be chosen _____ . You start by asking another player if they have a specific card _____ . For example, you can ask another player for their 5's. To do this, you must possess a card with that rank or number in your hand. The player will then _____ any card that they have of that rank. If you receive the card from the other player, you can continue asking for more cards. If the other player does not have the card you asked for, they'll tell you to _____ . Then you _____ a card from the top of the pile. If you actually draw the card you asked for, hold it up for the other players to see, and then you may take another _____ . If you draw a different card, your turn is over. The player on your left will take their turn. You wanna collect _____ with 4 cards of the same rank. This is referred to as a book. When you do, show the other players, then put the set in front of you _____ . The game continues until the players have used all of their cards in their hand or when the draw pile has been used up. Whoever collects the most sets of 4 cards of the same rank wins the _____ .

Score: _____ out of 15

3 Go Fish and variations

Go Fish is a simple card game played with a standard 52-card deck. It is a variant of the traditional *Happy Families* card game played in the UK with a set of 44 picture cards featuring families of four (mother, father, son, daughter), based on occupation types (the Vet, the Postman, the Baker etc.).

What is this game called in France? Explain the rules of the French game.

Work in pairs and invent possible variations of the basic rules of *Go Fish*. Share your ideas with the rest of the class.

4 How to win at *Go Fish*

Imagine you are dealt 5 five cards at the start of the game and you have 3 Jacks and 2 Aces. What rank would you ask on your first turn and why?

Work in groups of 3-5 and think about the best strategy to win at *Go Fish*. Write down 3 tips you could give to win. Share your ideas with the rest of the class.
My three tips:

Listen to the podcast and write down the five tips given in the podcast.

5 Probability and cards

5.1 Work in groups of 3-5 and work out a solution to the following problems.

(a) A card is selected at random from a pack of 52 cards.

Find the probability that the card will be the King of Clubs.

What is the probability that the chosen card is either a Queen or a 7?

Calculate the probability that the card will be a face card or a Heart?

(b) Three cards are drawn from a deck of 52 cards *without replacement*.

(c) Using a standard deck of 52 playing cards, what is the probability of drawing 5 cards of the same suit in a row?

Find the probability of drawing three Queens in a row with replacement.

(d) Two cards are picked from a deck of 52 cards. Find the probability that one of them is a diamond *and* the other is not a diamond.

5.2 Invent a problem

Work in groups of 3-5 and invent a short probability question involving playing cards. Find the answer to your problem and have your teacher check your solution. Copy your exercise as many times as there are groups.

My problem and my solution

5.3 Play time

Each group tries to solve the exercises of the other groups as quickly as possible. The group that solve all the problems first present their solution to the class.

Problems of the other groups and answers

6 Matching game

In *Happy Families*, the names of the family members are structured as follows where X stands for a surname and Y for an occupation: Mr X the Y, Mrs X the Y's wife, Master X the Y's son and Miss X the Y's daughter.

Match the family names with the occupations in the following *Happy Families* game: explore the sound occupation table below (click on the cells in columns 2, 4, 6 to listen) and fill in the right occupations matching the surnames in the second table.

Mr Molecule		Mr Cell		Mr Pi	
Mr Plant		Mr Galaxy		Mr Force	
Mr Wave		Mr Rock		Mr Brain	
Mr Data		Mr Student		Mr Spaceship	
Mr Cloud		Mr Patient		Mr Machine	

Help: Score: out of 15

7 Speak about yourself

Work in pairs. If you had to choose one occupation from the previous list, which one would you choose and why? Explain your choice to your partner while your partner takes notes and then change roles.
Write down your partner's answer below.

8 Play *Happy Mathilies*

Work in groups of 3 to 5. Write down the cards you are given to play with in the following table. Within your group of players, choose your own rules of the *Go Fish* game and play!

Mathilies	Card #1	Card #2	Card #3	Card #4	Card #5	Card #6

9 Homework

Choose one task from the following for your homework.

⭐ Write a one-page essay about a job you would like to do in the future.
⭐ Explain the rules of another popular card game and write a probability question with answer about this game.
⭐ Prepare a slide presentation about the history of probability (10-15 min presentation).
⭐ Write an algorithm to play a *Go Fish* game (one player against the computer, 52-card deck).
⭐ Create two new sets of 6-8 cards for the *Happy Mathilies* game (trigonometry, vectors, linear functions etc.).

Name: