PROBABILITY

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Istituto Istruzione Superiore

I.C.T.

LESSON PLAN

Teacher	CERUTI GIULIA RUOCCO CATERINA	Secondary school – fourth class
Subject	MATHEMATICS	
Learning	Number of lessons:	eight lessons
	Timing:	55 minute lessons; one lesson per week;

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Personal aim	Content: make student enjoy and learn about probability. Language: to encourage use of the language as much as possible in a non-judging environment. To help learners increase their English vocabulary and use language to make simple descriptions of videos and situations. To develop a more active and cooperative learning in class
Group profile	11 students
Materials, methods, instruments	Videos, papers, games, LIM peer to peer and cooperative learning; self-evaluation

Procedure   (T = teacher   S = students)

lesson	Aim	Procedure/activity with students T→S S ←→ S S ←→T	Time
1	to test previous knowledge and to widen students' vocabulary	Match pictures and words choosing from the list at the bottom of the paper. S ←→ S Try to guess the answer by an hint given by the teacher T→ S	1 hour
2	To memorize and exercise with L2	Fill in the gaps in the same paper of the previous lesson but not being given the list of words. Ask each other question about what they've learned S ←→ S	1 hour

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Procedure   (T = teacher   S = students)
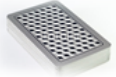
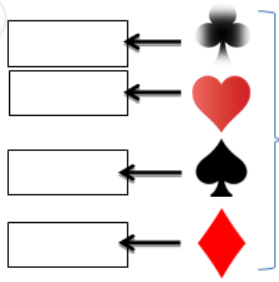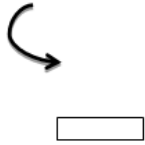|			
3	**To learn by doing and by experimenting**	Playing with maths and probability in different stands placed in the classroom with different probability's experiments trying to guess how to calculate the probability of some events requested	1 hour
4	to learn technical vocabulary and basic probability's concepts	Watch videos telling about probability's experiments and explain how to calculate the probability of elementary events.	2 hour
5	to improve communication skills in L2	Summarize the content of the videos	1 hour
6	to apply and verify knowledge	Test	2 hours

LESSON 1

Match pictures with words

Students will be given the following paper and will be asked to choose among the words in the list the correct one
to fill in each gap next to the pictures
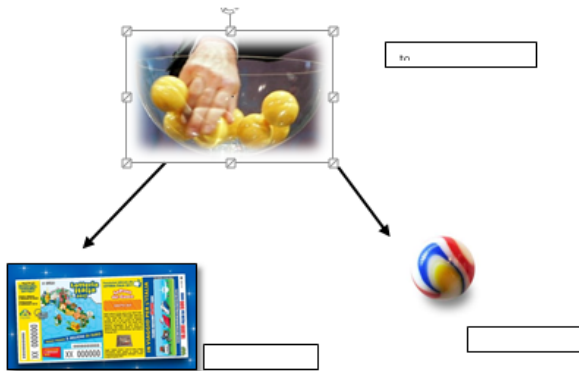
MATCH WORDS AND PICTURES:

$1,3,5,7,9 \rightarrow dispari$

$0,2,4,6,8 \rightarrow pari$

ONE

TWO

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Fill in the boxes with the correct word chosen from the the list below:

VOCABULARY:

ACE
CLUBS/CLOVERS
COIN
DECK
DICE
DIE
HEADS
HEARTS
JACK/KNAVE
JOKER
KING
LOTTERY
MARBLE
ODD
EVEN
TO PICK UP
PIKES/SPADES
QUEEN
SUIT
TAILS
TILES/DIAMONDS
TO SHUFFLE

LESSON 2

- Repeat the activity of lesson 1 without being given the list of words at the bottom of the paper

- Students will be supposed to ask each other questions to test the new vocabulary.

LESSON 3

PLAY WITH MATHS

Four stands are placed in the corners of the classroom with different probability experiments:
-dices
-marbles
-playing cards
-coins

The teachers organizes the class in four different groups which will be supposed to experience the four activities by going around the class.

The teams will be supposed to guess the probability of a required event by playing and experiencing concretely the situation.

LESSON 4

- Watch the following videos:

https://www.khanacademy.org/math/precalculus/prob-comb/basic-prob-precalc/v/basic-probability

https://www.khanacademy.org/math/precalculus/prob-comb/basic-prob-precalc/v/simple-probability

https://www.khanacademy.org/math/precalculus/prob-comb/basic-prob-precalc/v/probability-1-module-examples

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LESSON 4

- Make a glossary for math's lexicon and phrases

- Try to explain the experiments decribed in the video and how to calculate the probability of an elementary event.

- Ask a classmate about an experiment and the probability of an event similar to those discussed.

LESSON 5

Test

ENGLISH TEST   **NAME:**   **DATE:**   **CLASS:**

CONSIDERING THE FIRST VIDEO ABOUT PROBABILITY, FILL IN THE GAPS

A) The first part of the experiment is with a …………

The questions is: What is the probability of getting……………. P(H)=?

Let's do the experiment:

if we…………………………………………., we have two equally likely possibilities,

but the number of possibilities that meet my constraint

are………………………P(H)=……………(write down the fraction!)

in percentage, it is……………%

B) The second part is with a…………………………

The questions is: What is the probability of getting……………P(1)?

Let's do the experiment:

if we………………………………………………., we have six equally likely possibilities,

but the number of possibilities that meet my constraint

are………………………P(H)=……………(write down the fraction!)

And, P(1 or 6)=?………………

And, P(2 and 3)=?………………

And, P(even number)=?…………
C) CONSIDERING THE SECOND VIDEO, THE ONE WITH THE MARBLES, EXPLAIN THE EXPERIMENT (YOU CAN ALSO USE PICTURES) STARTING FROM THE QUESTION:

FIND THE PROBABILITY OF PULLING A YELLOW MARBLE FROM A BAG WITH 3 YELLOW, 2 RED, 2 GREEN AND ONE BLU

Fine documento ■

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