

It's all in your genes

Class: Middle school/high school

Level: Upper-intermediate.

Time : 45 minutes

Aims:

- To learn about genes
- To learn about dominant and recessive genes
- To learn about chromosomes
- To learn about heredity
- To learn vocabulary connected with genes and heredity
- To look for specific information on the internet
- To read for specific information
- To transfer the information.
- To use web pages

CLIL: ecology, biology

Materials : included photocopies, access to the internet and personal computer, speakers.

STAGE	AIMS	PROCEDURE	CLASSROOM LANGUAGE	TIME	MATERIALS
Introduction	To start the lesson	Check the register /check homework		1 min/ 6 min	
Warm – up activity	To provide students with introduction to the topic	Class discussion/ brainstorming to introduce the topic.	Do you take after your mum or your dad? What is the colour of your eyes? And your parents'? Your siblings? Can you roll your tongue? Are you short or tall ? Do you know why ?	5 min	
The main part of the lesson	To learn about the genes-introduction	Put the students into pairs. Ask the students to read the questions. Check the understanding of the task. Give time to search for the answers. Check the answers as a class.	Watch Part one of video and find out : http://www.neok12.com/video/Genetics/zX57774078797d7564675a0a.htm <ul style="list-style-type: none"> • Inside each cell there is a nucleus. What is it? • How many genes do we have? • What is DNA composed of? • What is the role of genes? 	10 min	Worksheet 1 Internet
	To learn about chromosomes.	Put the students into pairs. Ask the students to read the questions.	Now watch Part three and learn where do your genes come from.	10 min	

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		Check the understanding of the task. Give time to search for the answers. Check the answers as a class.	How many chromosomes do we have? <ul style="list-style-type: none"> Where do they come from? How is your sex determined? 		
	To learn about dominant and recessive genes	Ask the students to read the questions. Check the understanding of the task. Give time to search for the answers. Check the answers as a class.	What are dominant genes? <ul style="list-style-type: none"> What are recessive genes? What is a trait ? What is a diploid organism? What is a genotype? What is a phenotype? 	10 min	
	To learn about heredity rules	Ask the students to read the questions. Check the understanding of the task. Give time to search for the answers. Check the answers as a class. Ask a volunteer to draw a diagram on the board.	Read how the eye colour is passed from parents to children. http://www.sciencekidsathome.com/science_topics/genetics-a.html Can you draw the diagram for: BB and Bb parents?	10 min	
Wrap-up	To learn about hereditary traits	Students check if they have the dominant gene by checking the simple hereditary traits/might be set as homework	Ex. 6	5 min	

Sources:

<http://www.neok12.com/video/Genetics/zX57774078797d7564675a0a.htm>

http://www.sciencekidsathome.com/science_topics/genetics-a.html

<http://www.scienceprofonline.com/genetics/ten-human-genetic-traits-simple-inheritance.html>

<http://www.neok12.com/video/Genetics/zX5870617f4648547e590445.htm>

http://kidshealth.org/teen/your_body/health_basics/genes_genetic_disorders.html#

http://www.sciencekidsathome.com/science_topics/genetics-a.html

<http://www.pged.org/personal-genetics-101/what-is-genotype-what-is-phenotype/>