LESSON PLAN

Teacher	Svitlana SHVERNENKO
Form/Grade, level and number of learners	Grade 10, B1
Date	
Time	8.00-8.45

Lesson objectives/aims & learning outcomes

Language Skills	✓ Listening	✓ Reading	✓ Speaking	Writing
Language Resources	Phonetics	✓ Lexis	Grammar	✓ Spelling
Main objective/aim	by the end of the lesson, students will be able to learn 17 new words and phrases; read with general understanding describe and discuss the picture of the Universe in English.			
Subsidiary objective/aim	Students will be able to expand their vocabulary by learning 7 words and 10 phrases to describe the picture of the Universe; Students will be able to improve reading skills and pronunciation by reading a text; Students will be able to improve listening skills; Students will be able to take part in the scientific discussion.			
Personal objective/aim	To facilitate an engaging and interactive learning experience that helps students understand and apply new vocabulary related to scientific understanding of the Universe, and to encourage students to be tolerant to persons with disabilities.			
Learning outcomes	By the end of the lesson, students will be able to: ● Use 17 new words and phrases on the topic "Universe" appropriately; ● Read the target text, understand it and find specific information in it; ● Listen and comprehend the mediatext about a scientist; ● Engage in the discussion.			

Teaching aids:

1. SB (textbook)_ L. Kalinina, I. Samoiliukevych (10). pp. 113-115;
2. Warm-Up "Scale of the Universe" http://htwins.net/scale2/ ,
3. Interactive game (vocabulary practice): https://wordwall.net/uk/resource/64742515
4. Listening: "Motivational Success Story Of Stephen Hawking - From Lazy Student To an Amazing Scientist" https://youtu.be/L7dTY90Mww8
5. Reflection: *https://www.menti.com/algvt2z9oncz*
6. Handouts: Handout 1 "Vocabulary "WHAT'S YOUR PICTURE OF THE UNIVERSE"; Handout 2 "Vocabulary Practice", Handout 3 "Listening", Handout 4 "Scientists", Handout 5 "True or False", an image for presenting the new topic, a table with the names of the scientists

LESSON AGENDA

Time for each lesson stage (from…till)	Timing (… min)	Lesson stage and Procedures	Interaction patterns	Assess-ment
8.00-8.04	4 min	1 INTRODUCTION 1.1 Greeting and Learning Objectives 1.2 Warm-up (exploring "Scale of the Universe")	T→SS	**n/a**
8.04-8.14	10 min	2. GUIDED PRACTICE: Vocabulary: 2.1 Presenting new vocabulary: SB, p. 113 and Handout 1; 2.2 Practicing new words: Interactive game, Handout 2	T→SS S→SS S,S S→SS	*Oral and written answers*
8.14-	19 min	3 CONSOLIDATION:		*Oral*

8.33		3.1 Pre-Listening exercise: SB ex.b) p. 113 3.2. Listening 3.3 After-listening exercise: Handout 3; 4. Reading SB ex.a) p. 113-115: 4.1. Pre-reading exercise; 4.2. While-reading exercise: Handout 4 “Scientists”; 4.3. After- reading exercise: Handout 5 “True or False”	T→SS S,S S→SS T→SS S, S S→SS	*arswers* *A reading practise*
8.33-8.41	8 min	5. USAGE OF VOCABULARY IN SPEECH 5.1 Group work; 5.2. Polilogue.	T→SS S→SS	*Oral answers*
8.41-8.45	4 min.	6. CLOSURE: 6.1 Summary; 6.2 Reflection; 6.3 Evaluating; 6.4 Setting Homework	 T→SS S, S T→SS T→SS	**n/a**

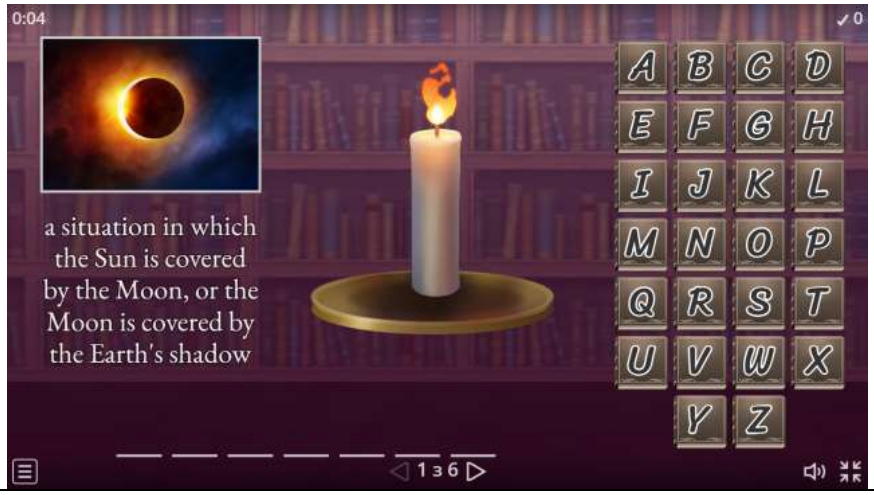
Anticipated problems	Solutions
Difficulty understanding new vocabulary words.	Provide clear definitions and encourage students to use the words in sentences to reinforce understanding.
Students may have difficulty with the pronunciation of words, especially when it comes to the phonetic transcription.	Practice pronunciation as a class by reading words aloud together. Use online resources or language learning apps to help students improve their pronunciation skills outside of the classroom.
Difficulty maintaining focus during writing students’ own sentences with new vocabulary.	Implement strategies such as using visuals, real-life examples, and engaging activities to keep students engaged and interested.

Reflection

1 Were aims met?	Yes	Comment if necessary	No	Comment if necessary
2 Were all stages/steps done?				
3 How did the student perform on tasks?				
4 Do you need to reteach? If so, what parts? How will you reteach?				

LESSON SCRIPT

Time	Stage, aim, method (прийом) time and timing	Teacher Talk Moves	Notes
8.00-8.04 (4 min.)	INTRODUCTION Aim: to organize the class Method: a discussion Setting objectives Aim: to demonstrate students clear aims of the lesson Method: a discussion	T: Good morning, class! I hope you're all doing well today. I’m so happy to see you again. Please, have a look at the picture. What is this? 	

	Warm-up Aim: to set students for work	How do you think what we are going to speak about today? Try to predict. During our previous lessons we spoke about schools and learning, so how are these topics connected? What are your ideas? T: So, today we are going to speak on the topic "What is Your Picture of the Universe?" By the end of the lesson you will be able to use new words and phrases on the topic "Universe"; read the text, understand it and find specific information in it; comprehend the video about a scientist; engage in the discussion. T: When we say that the galaxy is big, how big is it? Check out the interactive video "Scale of the Universe" http://htwins.net/scale2/ to explore the sizes of things large and small found in the universe. Use the scroll bar at the bottom of the screen to control the size of the objects – you can zoom in and out. You can click on any object to get information about that object. Your task is to find 1 thing that is about 1 m, 2 things that are more than Europe and 3 things that you found interesting. Be ready to explain your choice. So, what have you found?  T: Fantastic job, everyone! I'm excited to hear what has interested each of you.	
8.04-8.14 (10 min.)	GUIDED PRACTICE: Vocabulary: Aim: to provide controlled practice of new vocabulary Methods: 3.1 Presenting new vocabulary; 3.2 Practicing new words;	T: Alright, class, now it's time to enrich our vocabulary with some new words and phrases related to our topic. Now we're going to work with a worksheet (*handout 1*). On the worksheet you can see a table consisting of 5 columns. Each of you will take turns reading the word, its part of speech, meaning and then guess its translation. Pay attention to column 3. There you can see the transcription of the words. Are you ready? Then let's start. T: Good job! Now let's relax and play a game. Let's check how well you know the words. Follow the link **https://wordwall.net/uk/resource/64742515** and play a game "Hangman" Let's have a look who will be the fastest and who will get the best score. 	

		Fantastic! And for our next task you need these worksheets. Match the parts of the phrases and fill in the gaps in the sentences, using these phrases in proper tense forms. Read one by one. stellar / an argument to put forward / around orbit / birth to give / lecture on to give a public / back to to date / a superior smile 1. So the sun, the planets and life on earth depend on this beautiful cycle of_____, stellar death and stellar rebirth. 2. These traditions _____ medieval times. 3. A well-known scientist once _____on astronomy to a group of middle school students. 4. He_____ and promised to handle the problem. 5. The Earth_____ the Sun bringing the four seasons. 6. He has appeared before the court and_____. *(Keys: stellar birth, date back to, gave a public lecture, gave a superior smile, orbits around, put forward arguments)*	
8:14-8:33	3 CONSOLIDATION: Aim: to develop listening and reading skills 3.1 Pre-Listening exercise: SB ex.b) p. 113 3.2. Listening 3.3 After-listening exercise: Handout 3; 4. Reading SB ex.a) p. 113-115: 4.1. Pre-reading exercise;	T: One of the most outstanding scientists who explored our Universe was Stephen Hawking. Open your books on page 113 and find task b). Here you can see the problems which this great scientist tried to solve. Read the statement and the questions and try to add your own similar questions. T: I think, everyone has heard something about Stephen Hawking and his really inspiring life. And let's watch the video to get to know more. So, your task is to watch the video and think of 3 questions you would ask this great scientist if you had the possibility https://youtu.be/L7dTY90Mww8 What has impressed you most of all? What are your 3 questions? What is the most important about Stephen Hawking for you? And now take a worksheet and fill in the gaps with the numbers *(handout 3)*. Read what you have written. ***21 8 3 17 10 million 76*** 1. Stephen was not able to read properly until he was_____. 2. When Stepen was _____he went to Oxford University. 2. The doctors told him he had only two years left when he was only _____ 3. Stephen and Jane had _____children 4. Hawking's book "A Brief History of Time" was sold more than _____copies. 5. He died t the age of _____ Keys: 1) 8, 2) 17, 3) 21, 4) 3, 5) 10 million, 6)76 Amazing! Have a look at the text on p.113. Now you are going to read these extracts from Stephen Hawking's book for the non-specialist "A Brief History of Time". Read the title of the text and look at the pictures. Try to predict what theme is dealt with in this text. Look at the board and read the names from text	

	4.2. While-reading exercise: Handout 4 "Scientists";		

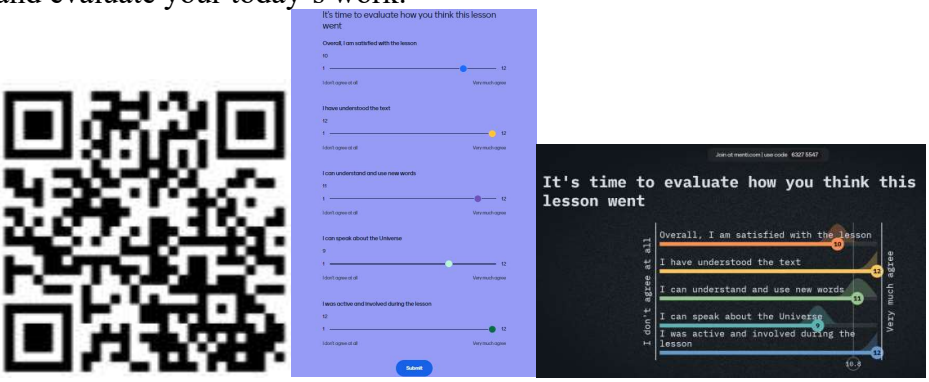
Bertrand Russell	[bɜːtrənd ˊrʌs(ə)l]
Stephen Hawking	[ˈstiːv(ə)n ˈhɔːkɪŋ]
Aristotle	[ˈærɪstɒtl]
Edwin Hubble	[ˈedwɪn ˈhəbəl]

Read the text and complete the table on the worksheet with the information about the scientists according to the text*(handout 4)*.

Keys

	Approximate period of researches	**Country**	**Impact on our picture of the Universe**
Bertrand Russell	*XIX-XX century*	*The UK*	*gave public lectures on astronomy, described how the Earth orbits around the Sun and how the Sun, in turn, orbits around the centre of a vast collection of stars called our galaxy.*
Stephen Hawking	*XX-XXI century*	*the USA*	*wrote a book for the non-specialist "A Brief History of Time"*
Aristotle	*340 B.C.*	*Greece*	*put forward two good arguments for believing that the earth was a round sphere (before that people used to believe that the earth was a flat plate).*
Edwin Hubble	*1924*	*the USA*	*demonstrated that ours was not the only galaxy*

	4.3. After- reading exercise: Handout 5 "True or False"	T: Very well! Now, I'll give you a worksheet. You are to read a statement and tell whether it's true or false and if it is false you should correct the mistake. *(handout 5)* __1. Bertrand Russell described that the world is really a flat plate supported on the back of a giant tortoise. (False, it was an old lady during his lecture) __2. Aristotle put forward two good arguments for believing that the Earth was a round sphere. (True) __3. Our modern picture of the Universe dates back to 340 B.C. (False, 1924) __4. Edwin Hubble worked out distances to nine different galaxies by measuring their apparent brightness. (True) __5. Our galaxy is only one of some hundred thousand and each galaxy itself containing thousand million stars. (True) __6. Our galaxy that is about one hundred light-years across and is slowly rotating. (False, one hundred thousand) There are 4 paragraphs in the text. In pairs make up your titles for every paragraph, presenting the main idea of every paragraph. Let's compare your variants…Great job.	
8.33-8.41	5. USAGE OF VOCABULARY IN	**T:** I don't know what kind of future is waiting for you, but I'm sure, it will be happy and successful. So, let's imagine your nearest future scientific	

(9 min)	SPEECH Aim: to expand student' language skills and enhance their communication abilities Methods: a discussion 5.1. Group work 5.2. Polilogue	conference and work in two groups. Firstly, prepare the materials. Students in group 1 are going to be journalists. So in group please make up 10 questions about the Universe and be ready to ask. Students I group 2 are going to be scientists that research the Universe. Prepare the information from the text for sharing. So, start working in groups, and don't forget to use new words and phrases. You have got 3 minutes for this task. Are you ready? The time for preparation is over, so take places here, in two areas. Let's start the conference. Dear journalists, raise the hands who have got the questions for our scientists. *Students ask and answer (How big is the Universe? - It's infinitive. – What is there in the space? – There are many galaxies that include stars, planets, dust. – What can you respond to the people that still think that the Earth is flat? And so on)* T: Amazing!	
8.41-8.45 (4 min.)	6. CLOSURE: 6.1. Summary Aim: to give a brief summary by students Methods: a discussion 6.2 Reflection; Aim: to develop the skills of reflection and self-evaluation Methods: an interactive chart 6.3 Evaluating; 6.4 Setting Homework	Now I want you to summarize what you have learned from today's lesson. What do you know about the picture of the Universe? And what do you remember about the scientists who developed this field of knowledge? What are you going to learn better about this topic? What should you revise by yourself? We have completed all the tasks and it's time for self-assessment. Use the QR code or follow the link https://www.menti.com/algvt2z9oncz and evaluate your today's work.  Students, all of you've worked well today. So your grades are the following ones: Student 1, you get ..., because … Student 2, your grades for today's lesson is .., because ... Students, it's time to finish today's lesson. For today at home you wrote learning tips for yourselves according to the scheme. So, hand in your notebooks, I would like to check these works. Let's write down your homework: SB, p. 115 Project work. Search the Internet and find the information about the Universe and be ready to present it to your class, using the new words: https://www.livescience.com/space https://www.nasa.gov https://www.space.com The lesson is over! Goodbye! Have a nice day.	

APPENDICES

Handout 1 VOCABULARY "WHAT'S YOUR PICTURE OF THE UNIVERSE"

№	Word, part of speech	Transcription	Word meaning	Translation	Example
			Word bank		
1	**average-sized,** adj	[ˈævᵊrɪdʒ ˌsaɪzd]	of a similar size to most others, not very large or very small	середнього розміру	*Our Sun is just an ordinary, average-sized star.*
2	**break-through**, noun	[ˈbreɪkθruː]	an important discovery or event that helps to improve a situation or provide an answer to a problem	прорив	*Recent breakthroughs in Physics made possible suggest answers to these questions.*
3	**eclipse**, noun	[ɪˈklɪps]	a situation in which the Sun is covered by the Moon, or the Moon is covered by the Earth's shadow	затемнення	*Eclipses of the Moon were caused by the Earth coming between the Sun and the Moon.*
4	**galaxy**, noun	[ˈgæləksi]	a very large group of stars held together in the Universe	галактика	*The Sun orbits around the centre of a vast collection of stars called our galaxy.*
5	**light-year**, noun	[ˈlaɪt ˌjɪə]	the distance that light travels in one year	світловий рік	*Our galaxy is about one hundred thousand light-years across.*
6	**to rotate**, v	[rəʊˈteɪt]	to turn in a circular direction, or to make something turn in a circular direction	обертатися	*Our galaxy is slowly rotating.*
7	**space**, noun	[ˈspeɪs]	the area outside the Earth	космос, простір	*There were many other galaxies, with vast tracts of spare space between them.*
			Phrase Bank		
8	**to be made possible by something**	[ˈpɒsəbl]	to be either enabled or made achievable due to something	бути можливим завдяки чомусь	*Recent breakthroughs in physics were made possible in part by fantastic new technologies.*
9	**to date back to (time)**	[deɪt]	to have existed a particular length of time or since a particular time	датуватися	*Our modern picture of the Universe dates back to only 1924.*
10	**to determine/ work out**	[dɪˈtɜːmɪn]	to discover the facts or truth about something	визначати	*He needed to determine distances to other galaxies.*
11	**a distance to something**	[ˈdɪstᵊns]	the length of the space to smth	відстань до чогось	*Edwin Hubble worked out distances to nine different galaxies by measuring their apparent brightness.*
12	**to give a public**	[ˈlektʃə]	to make a speech that is open to the public on some topic	виступати з публічною	*A well-known scientist once gave a public lecture on astronomy.*

	lecture on something			лекцією про щось	
13	**to give a superior smile**	[suːˈpɪərɪə]	to smile in the way as if the person who smiles is more intelligent than other people	поблажли-во посміх-нутися	*The scientist gave a superior smile before replying.*
14	**to orbit around something**	[ˈɔːbɪt əˈraʊnd]	to travel in a circle or oval around smth	обертатися навколо чогось	*The earth orbits around the Sun*
15	**to put forward an argument**	[ˈɑːgjəmənt]	to present a point of view or opinion in order to persuade or convince someone	висунути аргумент	*Aristotle was able to put forward two good arguments for believing that the Earth was a round sphere.*
16	**seem as obvious as something**	[ˈɒbvɪəs]	easily seen, recognized, or understood in comparison with smth	здаватись таким же очевидним, як щось	*Someday these answers may seem as obvious to us as the Earth orbiting the Sun.*
17	**stellar birth**	[ˈstelə ˈbɜːθ]	a process when a star is born by the gravitational collapse of a cloud of dust and gas	народже-ння зірки	*Depending on the size of the original lump of gas and dust, the process of stellar birth can give rise to different sorts of stars.*

Handout 2 "Vocabulary Practice"

Match the parts of the phrases and fill in the gaps in the sentences, using these phrases in proper tense forms.

stellar	an argument
to put forward	around
orbit	birth
to give	lecture on
to give a public	back to
to date	a superior smile

1. So the sun, the planets and life on earth depend on this beautiful cycle of_____, stellar death and stellar rebirth.
2. These traditions _____ medieval times.
3. A well-known scientist once _____on astronomy to a group of middle school students.
4. He_____ and promised to handle the problem.
5. The Earth_____ the Sun bringing the four seasons.
6. He has appeared before the court and_____.

Handout 3 "Listening"

Fll in the gaps with the numbers

21	*8*	*3*	*17*	*10 million*	*76*

1. Stephen was not able to read properly until he was_____.
2. When Stepen was _____he went to Oxford University.
2. The doctors told him he had only two years left when he was only _____
3. Stephen and Jane had _____children
4. Hawking's book "A Brief History of Time" was sold more than _____copies.
5. He died t the age of _____

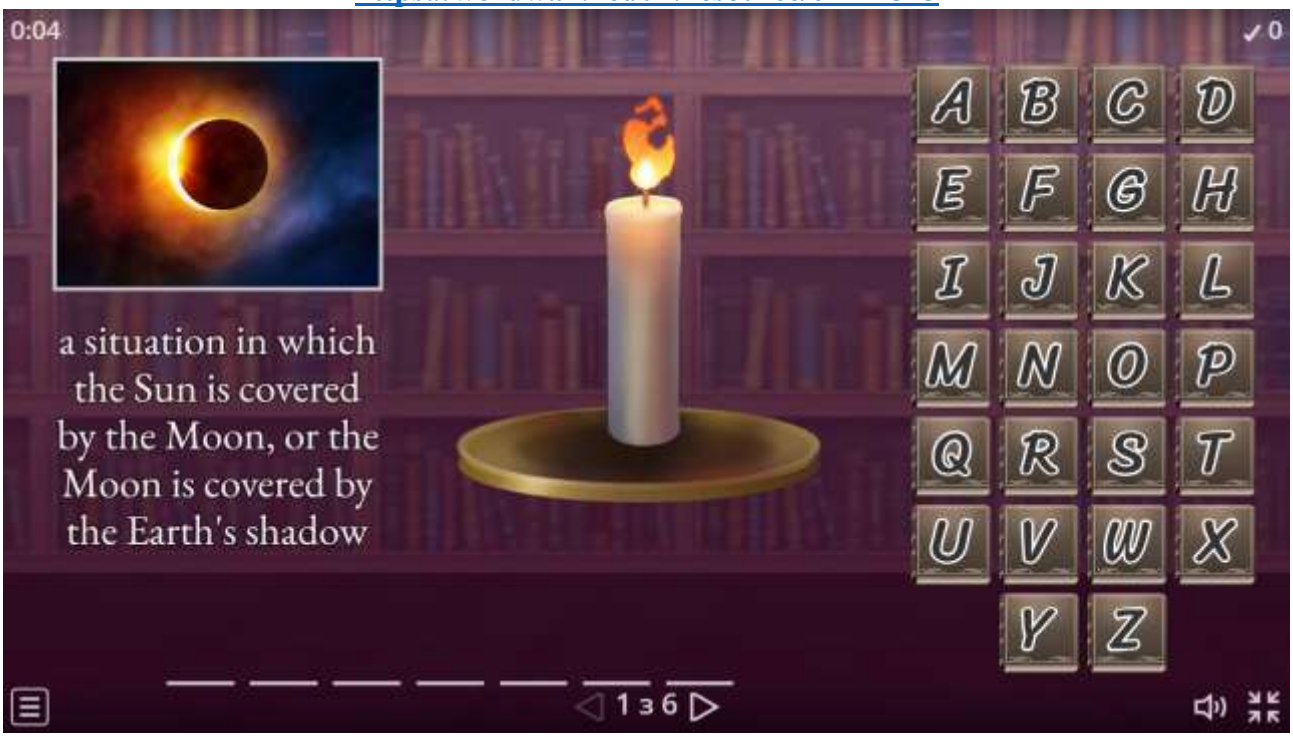
Handout 4 "Scientists"

	Approximate period of researches	Country	Impact on our picture of the Universe
Bertrand Russell			
Stephen Hawking			
Aristotle			
Edwin Hubble			

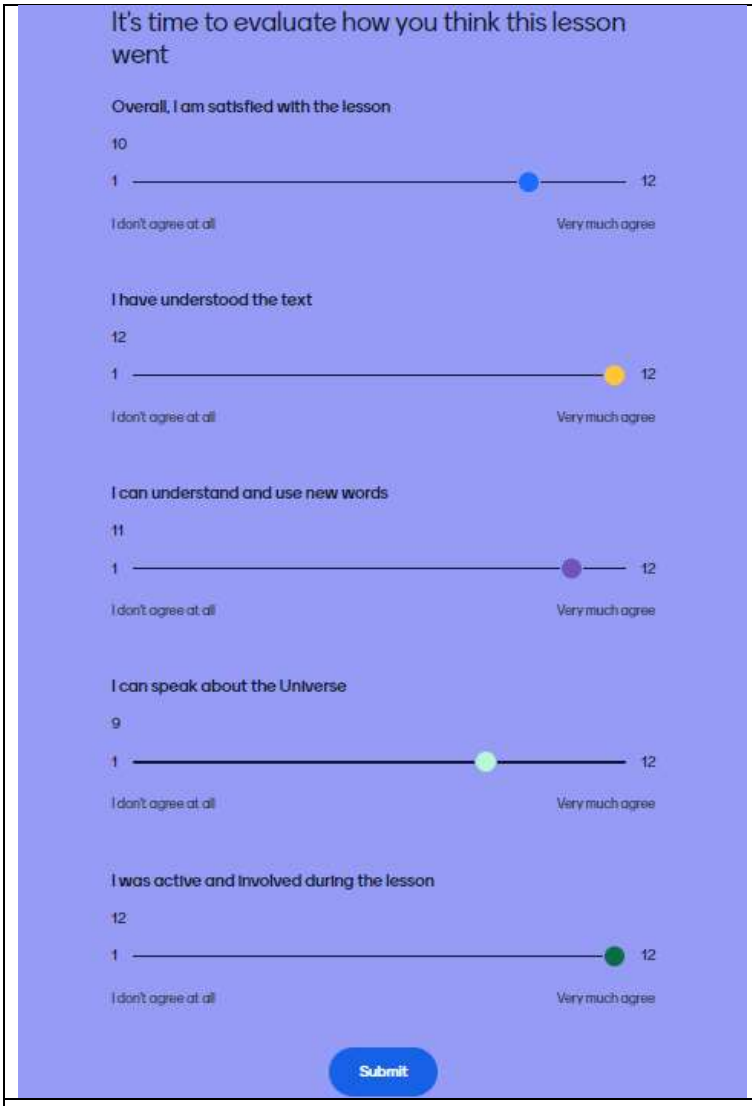
Handout 5 "True or False"

__1. Bertrand Russell described that the world is really a flat plate supported on the back of a giant tortoise.
__2. Aristotle put forward two good arguments for believing that the Earth was a round sphere
__3. Our modern picture of the Universe dates back to 340 B.C.
__4. Edwin Hubble worked out distances to nine different galaxies by measuring their apparent brightness.
__5. Our galaxy is only one of some hundred thousand and each galaxy itself containing thousand million stars.
__6. Our galaxy that is about one hundred light-years across and is slowly rotating.

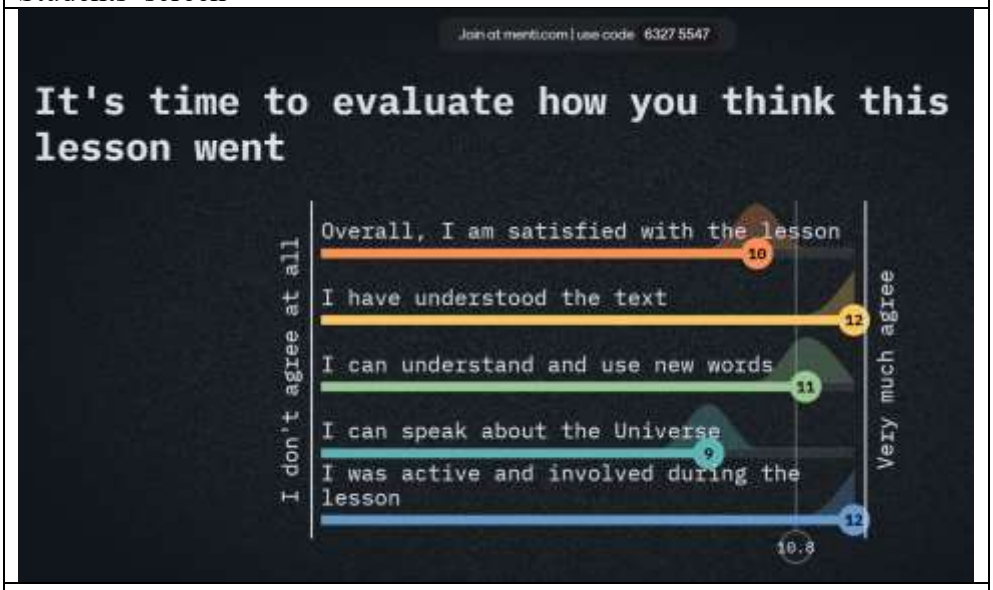
https://wordwall.net/uk/resource/64742515



Reflection *https://www.menti.com/algvt2z9oncz*



Students' screen



Teacher's screen

Bertrand Russell	[bɜːtrənd ˈrʌs(ə)l]
Stephen Hawking	[ˈstiːv(ə)n ˈhɔːkɪŋ]
Aristotle	[ˈærɪstɒtl]
Edwin Hubble	[ˈedwɪn ˈhəbəl]