CLIL Module Plan

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School Grade	Grade			○ Middle			○ High	
School Year	01	O 2	O 3	O 3			● 5	
Subject	Scienze		Topic		Astronomy			
CLIL Language	_anguage			O Deuts	sch			

Personal and social-cultural preconditions of all people involved

The project will be carried on in three different fifth classes. Students already know how to use all of the apps presented in the module. Students are used to working in groups or pairs, and they are comfortable using the I.T. lab. All three classes have 20 students (almost 50% boys and 50% girls). All three classes have students with BES or DSA. We also have some foreign students, that are well integrated in the group. I usually don't make different activities for them, but I try to make balanced groups, and/or exercises with universal design for learning. I'd rather have heterogeneous groups than homogeneous. Two of the three classes are loud classes. Classdojo helps a lot with class control. In one class we also have a volunteer of the Servizio Civile, that stays with us sometimes.

Students' prior knowledge, skills,	Subject	Language
competencies	Students know how to use research tools on Google Chrome. Students know how to use a dictionary online. Students know how to use online apps and softwares. Students can work in pairs and groups. Students know basic English language structures. Students are comfortable talking to classmates and adults.	English

Timetable fit	Module	Length 15h

Description of teaching and learning strategies

My philosophy is: "Let them do, but always keep track of what they're doing". I constantly incorporate technologies in my teaching: I mainly use: - Classdojo: (1) to assign points on a daily basis (like an evaluation grid) for helping others, listening, answering correctly, participating, persistence, teamwork etc. I never assign negative points. (2) To make random groups: students know that they have to work with whoever they are paired with, without complaining. Groups change almost every time. (3) Set a timer. (4) Class control: you can use the noise meter to keep students more quiet. You can give rewards if the whole class obtains enough points. - Canva: (1) to make presentations. (2) To prepare games (memory, flashcards etc.). - Plickers: (1) to assess students at the end of the lesson, see what they learned, and what needs improving. (2) To keep track of their progress. - Online games: I mostly use learningapps, quizziz, quizlet, kahoot, wordwall, jeopardylabs, and educaplay. (1) To make the learning process more interesting. (2) To review. (3) To introduce new topics. - Power points: (1) To keep up (for absent students). (2) To review. (3) To keep track of what we are doing. (4) To suggest additional information, games, or activities for home. - Google classroom: (1) For messages and reminders. (2) To upload ppts. All of my students know how to use all of these apps and are aware that everything they do in the classroom is part of the final assessment. Another strategy I often use is scaffolding, that usually comes in the form of pre-made sentences to help them carry out the tasks, for the first parts of a unit.

Overall Module Plan

Unit: 1

Astronomy throughout history

Unit length: 3h

Lesson 1

Learning the vocabulary

Lesson 2

Astronomy in the past

Lesson 3

Astronomy in the future

Unit: 2

The solar system

Unit length: 3h + 1h

Lesson 1

Researching a planet

Lesson 2

Creating an identity card

Lesson 3

Introducing our planet

Unit: 3

A pale blue dot

Unit length: 3h

Lesson 1

An infinite universe

Lesson 2

Planets' dimensions

Lesson 3

Planets' distance

Unit: 4

Setting our knowledge in stone

Unit length: 2h

Lesson 1

Online exercises

Unit: 5	Lesson 1
Going to space	Our own astronomers
Unit length: 4h	Lesson 2
	Building a rocket
	Lesson 3
	Letter to space
	Lesson 4
	Rocket exhibition

mber 1 Lesson number	1 Title	Learning the vocabulary
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	20 min.	Activate prior knowledge. Introduce the topic "astronomy".	Show the video: "Introduction to astronomy". Discuss together about the video. Brainstorming: "What is astronomy? What do you know about astronomy? Do you know any famous astronomer?". You can either do a classic brainstorm on the blackboard, or find an interactive brainstorming online software (I usually use MindMeister).	Skills L S R W Key vocabulary Astronomy; astronomer. Communicative structures Astronomy is I know A famous astronomer I know is	■ Whole class □ Group work □ Pair work ■ Individual work	Video: link Online brainstorming: link	Check if and how children are interacting. Assign points on classdojo for engagement, effort and participation.

2	and r	Memorize and repeat "space	Repeat "space words" on Quizlet. Play with the "learn" and "match" exercises in the app. If you're in the I.T. lab, students can play alone or	Skills L S R W	■ Whole class	Space	Check if and how children are
		words".	in pairs (depending on how many computers are available). If you're in the classroom, students can play all together, taking turns. Divide the students in pairs using classdojo. Play a memory game using "space words".	Key vocabulary Astronomy; astronomer; space; planet; star; spacecraft; eclipse; rocket; galaxy; milky way; universe; supernova; constellation; moon; earth; to orbit; to launch; to discover; to rotate. From now on, I will refer to all of these words as "space words". Communicative structures Repeat after me	work Pair work Individual work	Quizlet: link	interacting. Assign points on classdojo for engagement, effort and participation. Assign points for using "space words" correctly. You can use the results of the online games as another form of assessment.

Unit number 1 Lesson number 2 Title Astronomy in the past

Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	30 min.	Classify some of the most important astronomical events (from oldest to most recent). Discuss about the most important astronomical events throughout history.	Divide students in groups using classdojo. Give every group the photocopy "put in order astronomical events". Every group has to talk about the events, and try to classify them from oldest to most recent. They should be able to do that by using their prior history knowledge and by intuition. If you want to help them, you can tell beforehand the first event, an event in the middle, and the last event.	Skills L S R W Key vocabulary "space words" Communicative structures The first/second/third event is I think this is before/after	■ Whole class ■ Group work □ Pair work □ Individual work	Put in order the astronomical events.docx	Check if and how children are participating in the groups. Assign points on classdojo for engagement, effort and participation. Assign points for using "space words" correctly and for classifying events adequately.

2 Classify some of Skills Print and cut out the photocopy "timeline Whole • Timeline -Check if and 30 min. the most of astronomical events". Put an empty class Space how children S R W important timeline on the wall (a white thick arrow ■ Group L events.pdf are astronomical that goes from the first homo sapiens to work participating Key vocabulary events (from now). If you want to help your students. □ Pair in the group. "space words", classify, oldest to most put the first event, an event in the middle work Assign timeline. recent). Illustrate and the last event already on the points on the most timeline. Give every group some events. classdojo for Individual Communicative Take turns to put events and images on important engagement, work structures astronomical the timeline. Read the events out loud, effort and The first/second/third event and talk about every event, showing participation. events on a is... In this picture I can pictures online (e.g. maps of the Earth timeline. Discuss Assign see... about the most before Copernicus, Galileo's telescope, points for names of the constellations, moon using "space important words" astronomical landing, etc.). events throughout correctly. history. and for classifying events adequately.

Unit number	1	Lesson number	3	Title	Astronomy in the future

Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	20 min.	Formulate hypothesis about what humans will do in 5-10-100-1000 years. Get comfortable with using I.T. tools like Mentimeter.	Go to the I.T. lab. Watch the video "Here's How Far Humans Have Sent Spacecrafts In Space". Discuss together about the video, showing pictures online (you can show pictures of Saturn's moons, Pluto, spacecrafts etc.). Students write on a Mentimeter what they think humans will be able to achieve in the next 5, 10, 100, 1000 years. Read the results of the Mentimeter out loud, and discuss about their hypothesis.	Skills L S R W Key vocabulary "space words" Communicative structures In 5/10/100/1000 years humans will I think that I believe that Humans could	■ Whole class □ Group work □ Pair work ■ Individual work	Video: link Mentimeter: menti.com	Check if and how children are interacting. Assign points on classdojo for engagement, effort and participation. Assign points for using "space words" correctly.

Unit numbe	•	2	Lesson number	1	Title	Researching a planet
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	10 min.	Repeat and memorize "space words".	Go to the I.T. lab. Review "space words" using learningapps. Students can play alone or in pairs (depending on how many computers are available).	Skills L S R W Key vocabulary "space words" Communicative structures	□ Whole class □ Group work □ Pair work □ Individual work	Learningapps: link	Check if and how children are interacting. Assign points on classdojo for engagement, effort and participation. Assign points for using "space words" correctly. You can use the results of the online games as another form of assessment.

2 Skills Check if Locate on Divide students in pairs using classdojo. Every ☐ Whole 50 min. NASA's the internet, pair has to find information about a planet using class students are website: link L S R W ☐ Group finding and discuss only 3 websites: NASA's website, Wikipedia, Wikipedia: important context reverso (online dictionary). All the work accurate link Context Key vocabulary Pair information. information websites they can use are going to be linked on Reverso "space words" Google Classroom. Students will look for specific Assign about a work (online planet. information: name; position; temperature; mass; points on dictionary): Communicative Organize and diameter; revolution time; satellites. They can also classdojo for Individual link structures select find some non-specific information: curiosities. engagement, work effort and different types of participation. information. Assign points for using "space words" correctly and for finding good information.

Unit number	2	Lesson number	2	Title	Creating an identity card

Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	10 min.	Memorize and repeat the planets of the solar system.	Review the planets of the solar system using Quizlet.	Skills L S R W Key vocabulary Planets of the solar system	■ Whole class □ Group work □ Pair work	Quizlet: link	Check if and how children are interacting. Assign points on classdojo for engagement, effort and participation. Assign points for using names of the planets correctly. You can use
				Communicative structures Repeat after me	Individual work		the results of the online games as another form of assessment.

2	50 min.	Design an A3 poster about a	Using the information they found on the internet, students in pairs make an A3 poster, which should look like an	Skills L S R W	☐ Whole class ☐ Group	Check if and how children are interacting. Assign points on classdojo for engagement,
		planet.	identity card of the planet. They are also going to draw the planet if they want to, and add any type of	Key vocabulary "space words"	work Pair work	effort and participation. Assign points for using "space words" correctly. The poster itself is
			decoration.	Communicative structures The average temperature on [] is The revolution time is It has got [] satellites. The diameter is The mass is	□ Individual work	considered an assessment. You should look at the process of creating a poster, as well as the final result.

Unit number 2 Lesson number 3 Title Introducing our planet

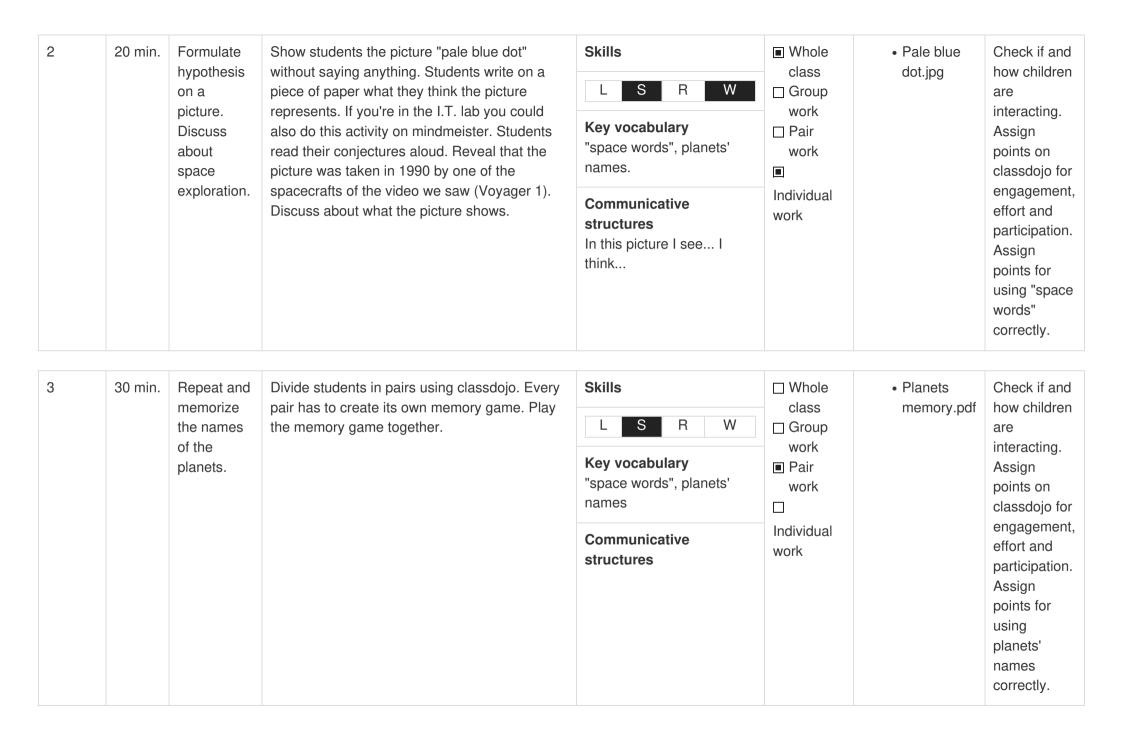
Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	10 min.	Compare and appraise classmates' posters.	Before the lesson begins, tape the identity cards on a wall. Students have 10 minutes to look at the different posters, and take notes. At this point, they should take notes on the overall look of the posters: Is it well designed? Has all the requested information been found? If you want to help your students taking notes, give them the evaluation grid.	Key vocabulary "space words" Communicative structures It is well designed. The information has been found.	□ Whole class □ Group work □ Pair work □ Individual work	Evaluation grid (poster).docx	This is a peer-assessment activity. Remember that students should always point out at least two good things, and suggest one thing they would have done differently. The evaluation grid should help your students taking notes.

2 Skills Evaluation grid This is a 30 min. Illustrate Taking turns, every pair shows its ☐ Whole poster to the classmates and talks class (presentation).docx the poster peer-S R W to the about its planet. At this point, students ☐ Group assessment classmates. should take notes about the work activity. Key vocabulary Pair Remember Explain presentation. Was the information well "space words" information explained? Did they make mistakes? work that students about the Are they using English? If you want to should Communicative help your students taking notes, give always point planet to Individual structures the them the evaluation grid. out at least work This is... The poster classmates. two good shows... The average things, and temperature on [...] is... suggest one The diameter of [...] is... thing they would have done differently. The evaluation grid should help your students taking notes.

3	10 min.	Compare, judge, and assess other students' posters.	On a piece of paper, every student writes two good things and one thing to improve of every pair. If your students are not used to peer-evaluation, you can give them the evaluation grid. Load on Google Classroom the ppt "The solar system". It's going to be useful for absent students, or for anyone who wants to review what we did today in the classroom.	Key vocabulary "space words" Communicative structures I think they did a very well I like I think you could improve	□ Whole class □ Group work □ Pair work ■ Individual work	 2. The solar system.pptx Evaluation grid (final).docx 	This is a peer-assessment activity. Remember that they should always point out at least two good things, and suggest one thing they would have done differently. The evaluation grid should help your students taking notes.
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Unit number	3	Lesson number	1	Title	An infinite universe
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	10 min.	Discuss about the content of a video.	Show students the video "universe size comparison 3D". Discuss together about the video. You can use stimulating questions like: "Did you know that the Universe was so big? Did you know how small Earth is?"	Skills L S R W Key vocabulary "space words"; big, small, huge. Communicative structures I think The video shows	■ Whole class □ Group work □ Pair work □ Individual work	Video: link	Check if and how children are interacting. Assign points on classdojo for engagement, effort and participation. Assign points for using "space words" correctly.



4	1h	Stimulate curiosity and furhter explore the Voyager spacecrafts.	This is an extra activity, you can decide to do it if you have time, and if you want to delve into the Voyager spacecrafts. Show students "the golden record", which is a coded message for anyone who might ever find the Voyager spacecrafts. It's a message to the future, just like the one we did at the beginning of the unit, with a lot of information about our planet and our species. Ask your students: "If you could talk to aliens, what would you tell them? What would you put on your Golden Record?" Draw your own Golden Record during the art lesson. You could also draw a Golden Record of the classroom/school/city, with all the most important information.	L S R W Key vocabulary "space words" Communicative structures	□ Whole class ■ Group work □ Pair work ■ Individual work		Check if and how children are interacting. Assign points on classdojo for engagement, effort and participation. Assign points for using "space words" correctly.
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Unit number 3 Lesson number 2 Title Planets' dimensions

Activity T	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1 30	30 min.	Design an easy representaion of a planet. Investigate planets' dimensions.	Divide students in pairs using classdojo. Give every pair a piece of cardboard. Tell students that now we're pretending the sun's diameter is only 200cm. Using the document "planets' dimensions", show your students how big the planets would be if the sun had a 200cm diameter. Ask every pair to build their own planet with the correct dimension.	Skills L S R W Key vocabulary "space words" Communicative structures	■ Whole class □ Group work ■ Pair work □ Individual work	• Planets dimensions.docx	Check if and how children are interacting. Assign points on classdojo for engagement, effort and participation. Assign points for using "space words"

2	30 min.	Compare Earth to the other planets.	Put the planets in order from smallest to biggest. Discuss about the dimensions. Divide students in groups using classdojo. Every group has to make observations: how many Earths can fit in the sun/Jupiter/Saturn? What's the biggest/smallest planet? Which planets	Skills L S R W Key vocabulary "space words", planets' names	■ Whole class □ Group work ■ Pair work	Check if and how children are interacting. Assign points on classdojo for
			are almost as big as Earth? Which planets are bigger than Mars? [].	Communicative structures Jupiter/Saturn can hold [] Earths Earth/Mars/Jupiter is bigger Neptune/Uranus is smaller Jupiter is the biggest Mercury is the smallest	Individual work	engagement, effort and participation. Assign points for using "space words" correctly, and for using correct forms of comparatives and superlatives.

Unit number 3 Lesson number 3 Title Planets' distance

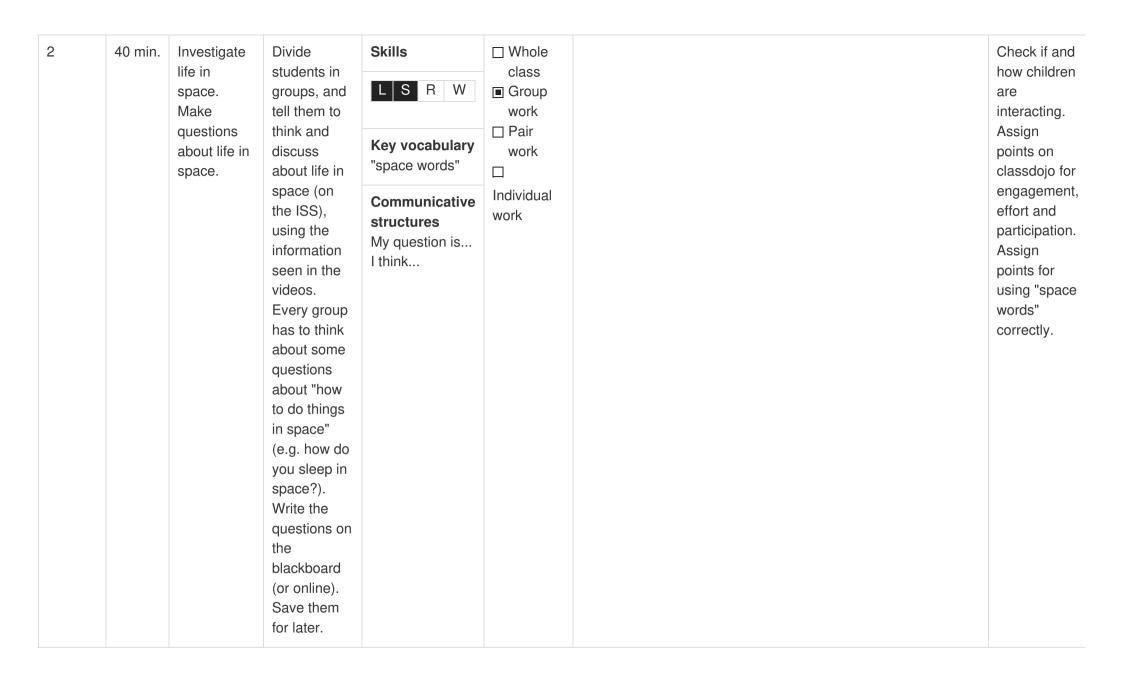
Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	20 min.	Observe and discuss the distance of different planets from Earth and the Sun.	Go to the school yard or to the park. Tell students that now the sun has a diameter of only 1 cm. Mercury is 42cm away. Venus, 77cm []. Put the planets in order at the correct distance. Discuss about the distances. You can look up distances and dimensions in scale on the document: "planets dimensions".	Key vocabulary "space words", planets' names Communicative structures The first/second planet is Earth is between Neptune is far from the sun Mercury is close to the sun	■ Whole class □ Group work □ Pair work □ Individual work	Planets dimensions.docx	Check if and how children are interacting. Assign points on classdojo for engagement, effort and participation. Assign points for using planets' names correctly.

2	40 min.	Investigate the distance of the planets.	Divide students in groups using Classdojo. Every group has to make observations: how many steps does it take to go from the sun to mercury? And from the sun to Earth? []. Try to make calculations. If you want, you can prepare a checklist for your students, so they can investigate specific information.	Skills L S R W Key vocabulary "space words", planets' names Communicative structures Earth/Mercury/Venus is [] steps from the sun.	■ Whole class ■ Group work □ Pair work □ Individual work		Check if and how children are participating. Assign points on classdojo for engagement, effort and participation. Assign points for using planets' names correctly.
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	2h	Repeat and memorize "space words". Repeat and memorize planets' names. Repeat and memorize everything we've done so far.	Go to the I.T. lab. Students can work alone or in pairs (depending on how many computers are available). Students complete the "online games" in order to set what we learned in stone. The last game is going to be a plickers.com exercise. All of the games are uploaded on Google Classroom, so that every student can do them again at home, or whenever they want.	Skills L S R W Key vocabulary "space words", planets' names Communicative structures	□ Whole class □ Group work ■ Pair work ■ Individual work	Quizlet "space words": link Quizlet "the solar sytem": link Learningapps "space words": link Learningapps "history of astronomy": link Learningapps "the solar system": link Learningapps "the solar system pt.2": link Quizziz "the universe": link Wordwall "space questions": link	You can use the results of the online games as a form of assessment.

Unit number 5	5	Lesson number	1	Title	Our own astronomers
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	20 min.	Discuss about astronauts' life in space. Promote science, engineering, and languages. Show examples of people (both man and women) from our territory that have been to space.	Watch some of Samantha Cristoforetti's and Luca Parmitano's videos. Discuss with the students about the videos. Watch a ppt about Samantha and Luca.	Skills L S R W Key vocabulary "space words" Communicative structures In the video I see I think	■ Whole class □ Group work □ Pair work □ Individual work	4. Samantha Cristoforetti and Luca Parmitano.pptx Samantha's video: youtube.com/watch? v=ILAiw5GQckg&ab_channel=EuropeanSpaceAgency%2CESA Luca's video: link	Check if and how children are interacting. Assign points on classdojo for engagement, effort and participation. Assign points for using "space words" correctly.



Unit number 5 Lesson number 2 Title Building a rocket

Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	30 min.	Investigate what's needed to	find out about the steps to build a class baking soda + vinegar rocket. Discuss together about the different options.	Building a rocket.pptx	Check if and how children are interacting Assign points on		
		build a rocket.		•	□ Pair		classdojo for engagement, effort and participation. Assign points for using "space words" correctly.
				structures To build a rocket we need I think We can	Individual		

2	and	a rocket with recycled material that students bring from home.	Skills L S R W	☐ Whole class ☐ Group work	Check if and how children are participating in the group. Assign points on classdojo for	
		4.705.101.		Key vocabulary "space words"	□ Pair work	engagement, effort and participation. Assign
				Communicative structures	Individual work	points for using "space words" correctly.

Unit number 5 Lesson number 3 Title Letter to space

Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1 1	1h	Design and write a letter to	Using the questions that the students formulated in the first part of the unit, write a letter to Samantha and Luca. Students are going to write a letter all together (on the	Skills L S R W	■ Whole class		Check if and how children are
		Samantha Cristoforetti and Luca	e-board). They can also attach drawings and pictures of the rockets to the letter. The teacher is going to send the letter to Samantha and Luca.	Key vocabulary "space words"	work □ Pair work		interacting. Assign points on
		Parmitano.		Communicative structures	Individual work	classdojo for engagement, effort and participation. Assign	
							points for using "space words" correctly.

Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1	1h	Show to the community what we learned in the classroom.	At the end of the school year, in May, we are going to do a school festival. There is going to be a room where our 5th classes do a rocket exposition. Every student can show their creations to the community, and explain what we did in the classroom. If you have time, students could also design posters that briefly explain the main features of their rockets, and maybe put some pictures on the wall of the "work in progress".	Skills L S R W Key vocabulary "space words" Communicative structures	■ Whole class ■ Group work □ Pair work □ Individual work		For this last activity there's not going to be any type of assessment. Students should be able to just enjoy what we did in the past months, and be proud to show the community our final results.