matatalab

Matatalab Edu Activity/Lesson Plan:

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Classroom Key Information

Content-Related:

Computer Science☑ Math☑ Art☐ Music☐

Science☑ ELA☐ Social Study☐ Other: Primary School

Time: 3 classes, 1h each + autonomous research work Grade: 3rd and 4th

Complexity: ★☐ ★★☐ ★★★☑ ★★★★☐ ★★★★★☐

(★stands for the easiest)

Activity/Lesson Key Information

Project Name: Back to The Moon

Big Idea: Design and create a Game about the solar system

Concepts: This LS will fit Portuguese National Curriculum in the following topics:

Estudo do Meio: Solar System; Moon; Human body Systems

Portuguese: Reading comprehension of the Story: "The Adventures of Tintim: Destination: Moon" (Portuguese Version)

ESL: Reading comprehension of the Story: "The Adventures of Tintim: Destination: Moon" (English Version)

Maths: Numbers and Operations; Geometry

Arts

Main Objectives:

- Learn about the Solar system; Learn about Planets' characteristics; Learn about rockets;
- Share findings with peers; Design,create and make their own Solar System game

Learning Outcomes:

Game about the solar system

Key Vocabulary:

Primary; Solar System; robotics; Coding; Living conditions

Prior Knowledge:
Solar System; Means of Transport; Measurments; Art skills

Standards(ISTE, CSTA, CCSS, NGSS, etc.):

Matatalab Products & Supplementary Materials

Coding Set☑ Music Add-On☐ Artist Add-On☐ Pro Set☐
Animation Add-On☐ Sensor Add-On☐ Lite☐ MATATA Map☐

Supplementary Materials
Colours; pencils; scissors; glue; printer; cardboard; ruler;

Detailed Activity/Lesson Plans

Matatalab Edu classic lesson

	Instructions step by step	Time
Lead in & Guided Activity	Students will read and explore the story "Destination: Moon!", by Hergé (Autonomous work at home). Afterwards, in large group, students will debate the voyage to the Moon, and the best way to get there. (Peer discussion on topics raised by this and information obtained will be recorded on a collaborative Paddlet.)	1h
	Students will watch the video "Paxi explores the Moon".	1h
	In large group, students will debate if it would be possible to live in the Moon. Teacher could pose questions, to spark discussion: - What do humans need to live? - What does the Moon look like? - What are the Moon surface's characteristics? - How can we settle in the Moon? - How could we travel around the Moon? - What would a Moon camp look like?	
	Students would fill in a 2nd KWL chart, registering what they know about the Moon, things they learnt with the video and what they need to learn to answer some of the above questions. Students will then be grouped and develop collaborative tasks in order to design and plan their game .	1 week 1h per day
	Students will then be challenged to perform autonomous work, research about the solar system and create 3 different questions and answers, and design a game mat to use with the robot, in order to create a game that will help everyone learn further about the solar system.	
	Once the children have completed their prototypes, they will peer review each groups work by using a checklist to assess the design. They will look back over their KWL chart and fill in as needed.	1h
	Students will vote the best prototype and build the most voted Game in 3D, using recycled and raw materials.	1 week 1h per day
	The Game will be exhibited in the School lobby.	

Detailed Activity/Lesson Plans

Matatalab Edu classic lesson

	Instructions step by step	Time
Independent Activity	Students will read and explore the stories “Destination: Moon!” and "Tintin Explorers on the Moon", by Hergé, in an independant reading task; in parallel students wil be challenged to watch and explore Paxi's videos, in a way to learn more about the solar system.	Time depends ons students' reading abilities
Feedback & Extension	Feedback is through peer review and teacher observation assessment. The assessment of this activity is through self-evaluation of the child’s finished project. What went well? What went wrong? Why? What would you change? Why? Teacher assessment of finished product.	