

States of Matter

WebQuest Description: Matter is all around you, will find out what is matter and what are the different states of matter

Grade Level: 3-5

Curriculum: Science

Keywords: Solid, Liquid, Gas, Matter, State

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WebQuest URL: <http://zunal.com/webquest.php?w=378382>

Introduction

Hello! kids today you are going to learn about Matter. Get ready to investigate what is matter. Look around you, everything that you see is made up of matter. Matter is the air you are breathing. Matter is the computer you are reading from now. Matter is the stuff you touch and see. You will also find out the three states of matter. Get ready to be explorers and find out more about what is around you. Let's Zoom in!

Tasks

Your task :You have become an explorer with a partner, you are going to investigate what is matter? What are the three state of matter and their molecular structure? what are the properties of matter? How can temperature change the state of matter? What are some examples of matter?

Process

Engage: Students will be engaged in karaoke, they will sing a song about "Solid, Liquid and Gas". Link to karaoke song: <http://studyjams.scholastic.com/studyjams/jams/science/matter/solids-liquids-gases.htm> In this lesson, learners will be told to imagine they are explorers and they have just heard about "Matter". Students will identify each state of matter and take a close look at each of their structure. This will be done in pairs, learners will look at the following video and make notes on each state of matter, along with drawings. <https://www.youtube.com/watch?v=jmm1J2yI9tk> Explore: As an explorer student will investigate the properties of solid, liquid and gas. In the attached file, there is a link called properties of matter video which the students will watch together. Students will be instructed to make notes in their books. The KWL strategy will be used to find out about how matter changes from one form to another. Students will be asked questions which will be written in their notebooks in table format. Questions Such as: What happens when a glass of water is put in the freezer? What happens when ice cubes are put in the microwave or the oven? What happens when you boil water on the stove? Students will watch a video. Students will observe the change of matter. Change of matter video: https://www.youtube.com/watch?v=_GuKT6F9u2A Explain: Students will be engaged in an activity called "The Magic Teapot: Ice turns to Steam." With the use of pictures, students will be shown the different state of matter. First start with ice: Students will identify it as solid. Students will describe the properties. Students will be instructed to explain why it is solid. After a glass of water will be shown. Students will identify it as a liquid. Students will describe the properties. They will explain why it is a liquid. Students will be told to reflect on the previous video, solid object that heat is applied to, students will make notes of the changes. Expansion: Students will work in pairs and reflect on what they have learned about solid, liquid and gas. Students will then complete the worksheet in pairs. Worksheet: <http://www2.mcdaniel.edu/Graduate/TI/pages/LEWIS/worksheet.htm> Evaluate: As an explorer student will watch a video about "Matter" to summarize what they have learned about solid, liquid and gas. Video: <http://studyjams.scholastic.com/studyjams/jams/science/matter/solids-liquids-gases.htm> Students will then click the word "close" and then "test yourself" to complete a quiz. In the attached file, There is a link to a game which students will play in their pair.

Evaluation

The rubric will be used to assess what students know about "Matter." Students will be marked during a discussion.

Category and Score	Excellent (12)	Satisfactory (7)	Good (4)	Poor (2)	Score
States of Matter	Students are able to tell all the states of matter	Student are able to tell two states of matter	Student are able to tell one states of matter	Student are not able to supply a state of matter	25
Properties	Students are to able to tell all the properties matter	Students are able to tell three of properties of matter	Students are able to tell two properties of matter	Students are able to tell one property of matter	25

Category and Score	Excellent (12)	Satisfactory (7)	Good (4)	Poor (2)	Score
Examples of each State	Students are able to give 5 examples of each state of matter	Students are able to give three examples of each state of matter	Students are able to give two examples of each state of matter	Students are able to give one example of each state of matter	25
Change of State (Processes)	Students are able to tell the name of all the processes in the change of matter	Students are able to name at least four processes in the change of matter	Students are able to name at least two of the processes in the change of matter	Students are able to name one of the processes in the change of matter	25
				Total Score	100

Conclusion

I hope that you enjoyed my webquest about "Matter". The matter song is a valuable resource that can be memorized to sing over and over again to help students to remember the three states of matter. Learning the three states of matter, properties, and the processes which occur during the change of state is an important lesson about the surrounding. In conclusion, I hope that the activities and lessons were beneficial and entertaining. Additional Information: <http://www.ouruniverseforkids.com/matter/> <https://lifestyle.howstuffworks.com/crafts/science-projects/science-projects-for-kids-states-of-matter.htm>

Teacher Page

For Teacher: The purpose of this webquest was to enhance the teaching and learning of matter, its properties, examples of each state as well as the name of processes when changing from one state to another. This webquest would take approximately 1 hour and 15 minutes to be completed by the students in the classroom of grade 3 to 5. I would advise teachers not to rush students during the webquest processes as they should be allowed to explore and work at their own pace. Students should be paired with mixed capabilities during this webquest.

Standards

This lesson would be appropriate for grade 3 to 5. The topic matter would be categories under the subject Science at the primary level.

Credits

<https://www.youtube.com/watch?v=ELchwUIIWa8> <http://studyjams.scholastic.com/studyjams/jams/science/matter/solids-liquids-gases.htm> <https://www.youtube.com/watch?v=jmm1J2yI9tk> https://www.youtube.com/watch?v=_GuKT6F9u2A <http://www2.mcdaniel.edu/Graduate/TI/pages/LEWIS/worksheet.htm> <http://studyjams.scholastic.com/studyjams/jams/science/matter/solids-liquids-gases.htm> <http://studyjams.scholastic.com/studyjams/jams/science/matter/properties-of-matter.htm>

Other

Teachers ensure to facilitate to your students.