

IT'S ALL ABOUT THE BLOCKS IN MINECRAFT

-Learning About Rocks and Minerals-

Content Area: Science

Grade Level 2-4

Timeline: 2-3 Days with 45-60 min. sessions

Learning Targets:

- Students will be able to identify rocks and mineral blocks found in Minecraft and research facts about 5 rocks.
- Students will be able to cite webpages used in their research and hyperlink them in their presentations.
- Students will work together to use the researched facts of the Minecraft blocks to create a music video.

ISTE Student Standards:

- **Creativity and Innovation:** Use models and simulations to explore complex systems and issues.
- **Communication and Collaboration:** Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- **Critical Thinking, Problem Solving, and Decision Making:** Plan and manage activities to develop a solution or complete a project.

Lesson Summary:

In small groups of 2-3, students will spend time mining in Minecraft and keep inventory of the rocks and minerals they mine. After 15 minutes of mining, the groups will choose 5 rocks/minerals to research. They will then share their researched facts in the form of a music video to the song, "It's All About the Blocks" to the tune of "All About the Bass" by Meghan Trainor.

Resources:

- Minecraft Pocket Edition on at least one device per group.
- Student Resources
 - [Group Mission](#)
 - [Block Inventory Worksheet](#)
 - [Rock/Mineral Research Resources](#)
 - [Presentation Template](#)
- ["All About the Blocks" Recording on SoundCloud](#)

Procedures:

- 1) Introduce students to Minecraft. Have students share how they have used it on their own. If time allows, have students share some of their creations with others.
- 2) Ask them what they know about the blocks they use to build. List some of the characteristics of the blocks. Tell them that they will be mining and learning more about the blocks in Minecraft during their lesson. Hand out or display the Group Mission doc and go through the procedure with the students.
- 3) Students will take turns mining for Earth materials in Minecraft. Students will keep inventory on the [Block Inventory](#) sheet.
- 4) After the mining time is over, groups will select 5 blocks/earth materials that they would like to learn more about.
- 5) Using the Internet or books on rocks and minerals, groups will research facts about each earth material. They will make sure to cite the website that they used while collecting facts and pictures. They will research and take notes on:
 - a) Name of Rock/Mineral
 - b) [Classification](#)
 - c) Where it can be found on Earth
 - d) [Uses for the rock/mineral in the real world.](#)
- 4) After they have compiled the research on each of the 5 rocks/minerals, they will put the information in a Google Presentation.
- 5) When they are done with all of your slides, they can create a music video to the song, "It's All About the Blocks," which is linked above. (To the Tune of "All About the Bass." Lyrics by Jennifer Bond and 3rd Grade Students.) The music video needs to include the information that you researched for your 5 rocks/minerals.
 - Students can choose to change the presentation slides to jpgs and then create a slideshow to the audio using an app/site of their choice or even present their facts on posters while they dance and sing.
- 6) They can upload their video to Edmodo and then the class can have a Rock and Mineral Minecraft Music Video Film Fest when they are all created!

Possible Extensions:

- Students can create their own 3-D blocks and write the facts on them. These could be displayed in the classroom or a showcase, and then they could be used to play with during indoor recesses later on.

Minecraft Play!



- Students could combine their Google Presentations to create a class book, much like the Blockopedia that has been published by Minecraft.

Evaluation:

Students will be assessed on their ability to share the required facts about each of the 5 rocks/minerals through their Google Presentation. Students will also be assessed on the citing of web pages through the use of hyperlinks. Finally, students will be given peer feedback and comments on their music video through their Edmodo discussions.