**Grade 4 Geology Program**

**Post Activity – Mineral Bingo**

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| **Grade** | 4 | **Subject** | Geology | **Time Required** | 30-60 minutes |
| **Objectives** | By exploring the ways that various minerals are used around our house or school in our everyday lives, students will be able to explain how minerals are important to us. |
| **Outcome(s)** | **300-8** Relate characteristics of rocks and minerals to their uses. |
| **Materials** | Mineral Bingo sheets (included)Pens/pencilsHome or classroom to exploreComputers (Not required, but can be used to extend activity) |
| **Introduction** | Students will have been introduced to the differences between rocks and minerals during the museum program. They were also shown the vast array of different minerals that are known to exist. Explain to the students that minerals are a very important natural resource. Though they may not realize it, they use many different minerals every single day. Without these minerals many of the things that make life easier wouldn’t exist. Light bulbs, toothpaste, and even television wouldn’t be possible without these materials. Describe the activity that they are going to take part in, depending on how you choose to utilize it (homework, in-class, or computer lab activity). |
| **Procedure** | Provide the students with a mineral bingo sheet. Explain that their goal is to create a line down, across, or diagonally by locating, in their own home or classroom, the proper items in the boxes and noting the specific minerals used to create them. Have students record where in their home/classroom they found each item. There is also a good interactive website that highlights the different ways that minerals are used throughout a typical house. This website could be used in lieu of actual exploration around the classroom/school/house. The address for this site is: <http://www.teachersdomain.org/asset/ess05_int_mineralenv/> |
| **Conclusion** | When the students return from their exploration, either in the classroom, computer lab, or as homework, have them sit and share the items they found and the minerals used to create them in a class discussion. Ask them to imagine a world that didn’t include the minerals from their bingo sheet. How would life be different or more difficult? Would there be something that they could use to replace those minerals and their uses? Were they surprised to see just how many uses minerals had? |

Mineral Bingo

Try to make a straight line down, across, or diagonally by finding how minerals are used every day at home. Look at the different items on the bingo sheet, take note of the mineral used to make them, and see if you can find it in your house. Find the right items to line up a row, write down where you found them, and BINGO!

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| C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\ZRHJXX3Q\MM900336779[1].gifQuartz in window panes | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\6VNNTYNS\MC900434769[1].pngAluminum in drink cans | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\0RQ4QXB4\MC900241325[1].wmfPhosphateIn lawn fertilizer | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\6VNNTYNS\MC900388970[1].wmfGypsum in drywall | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\D9IFQH31\MC900290592[1].wmfIron in nails and screws |
| C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\6VNNTYNS\MC900325370[1].wmfTalc in baby powder | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\46CCPEDQ\MP900384825[1].jpgGold in jewelry | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\BIIBV3DJ\MC900349011[1].wmfHalite, also known as salt | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\0RQ4QXB4\MC900432617[1].pngTungsten in light bulbs | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\5LH30FFV\MP900289808[1].jpgCopper in pipes |
| C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\SNWFZ3IU\MC900434872[1].pngGraphite in pencils | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\BE5NQGD3\MC900437839[1].wmfNickel in rechargeable batteries | **FREE SPACE****FREE SPACE****FREE SPACE** | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\WWQT04KP\MC900300073[1].wmfTin in food cans | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\0RQ4QXB4\MC900441288[1].pngClay minerals in bricks |
| C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\LE8SCLGU\MC900290743[1].wmfFluorite in toothpaste | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\46CCPEDQ\MC900441834[1].wmfBeryllium in fluorescent bulbs | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\BE5NQGD3\MC900030076[1].wmfSilver in jewelry | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\NHACQ14K\MC900290024[1].wmfFeldspar in ceramics | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\WWQT04KP\MC900040406[1].wmfBentonite in kitty litter |
| C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\D9IFQH31\MC900056871[1].wmfCorundum in jewelry (sapphire and rubies) | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\PO53Q063\MC900013420[1].wmfMica in oven windows | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\JIUNM2HU\MC900325300[1].wmfZeolites in clothing detergent | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\NHACQ14K\MC900441293[1].pngBarite in paint | C:\Documents and Settings\MACDOME\Local Settings\Temporary Internet Files\Content.IE5\6VNNTYNS\MC900250778[1].wmfBismuth inStomach-upset medicine |