**7th Grade Worksheets**

Follow along with your VSVS team using these sheets and info!

**Table

Description automatically generatedChemical Reactions Observation SheetTable

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**Effect of Carbon Dioxide on the Environment**

**Observation Sheet**  Student’s Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| Lesson Activity | Observations |
| **II. Comparing Dry Ice to H2O Ice**  a) What happens to the dry ice in the bag? The regular ice? |  |
| b) What happened to the dry ice left on the plate? The regular ice? |  |
| **III. Carbon Dioxide in Ocean Water**  What color did the Universal Indicator solution turn when dry ice was added?  What does this tell you about the effect of carbon dioxide dissolved in ocean water? |  |
| **IV. Cave Formation**  What happens to the Tums when acid was added to it  What does this tell you about the effect of carbon dioxide dissolved in rain water on limestone, coral reefs and sea shells ? |  |

**Effect of Carbon Dioxide on the Environment**

**Observation Sheet**

**Answer Sheet**

|  |  |  |
| --- | --- | --- |
| Lesson Activity | Observations | Change of State |
| **II. Comparing Dry Ice to H2O Ice in a bag**  A What happens to the dry ice in the bag?  B The regular ice? | A Ziploc bag with dry ice fills with gas (CO2).  B. Ziploc bag with ice doesn’t change in size | A. solid to gas (sublimes)  B. none |
| **II. Comparing Dry Ice to H2O Ice on the plate**  A What happened to the dry ice left on the plate?  B the regular ice? | A1 Dry ice CO2 changes from solid to gas  A2 Water vapor in air is cooled by dry ice to form tiny particles of ice water, seen as “smoke(water vapor).  B Water ice melts | A1. solid to gas (sublimes)  A2. gas to liquid to solid  B. solid to liquid |
| **III. Carbon dioxide in Ocean Water**  What color did the Universal Indicator solution turn when dry ice was added?  What does this tell you about the effect of carbon dioxide dissolved in ocean water? | From blue to green to yellow to red. | No change of state This is a chemical change |
| **IV. Cave Formation**  What happens to the Tums when acid was added to it  What does this tell you about the effect of carbon dioxide dissolved in rain water on limestone, coral reefs and sea shells ? | The Tums tablet fizzes in the acid and disintegrates. | No change of state This is a chemical change. |

**Crazy Traits**

**Observation Sheet**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Trait** | **Genotype of mother for the trait** | **Genotype of father for the trait** | **Genotype of offspring (after tossing coins)** | **Phenotype of offspring** |
| Gender | XX | XY |  |  |
| Skin color | Tt | Tt |  |  |
| Leg | Tt | Tt |  |  |
| Foot | Tt | Tt |  |  |
| Arms | Tt | Tt |  |  |
| Hands | Tt | Tt |  |  |
| Eye Color | Tt | Tt |  |  |
| Eyebrows | Tt | Tt |  |  |
| Beak | Tt | Tt |  |  |
| Ears | Tt | Tt |  |  |
| Antenna | Tt | Tt |  |  |
| Antenna shape | Tt | Tt |  |  |
| Tail | Tt | Tt |  |  |
| Wings | Tt | Tt |  |  |

Look around at the creatures for other groups. Do any of the creatures look the same?

List the dominant traits below.

List the recessive traits below.

Are there any traits that are not dominant or recessive?

**Crazy Traits**

**Observation Sheet Answers**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Trait** | **Genotype of mother for the trait** | **Genotype of father for the trait** | **Genotype of offspring (after flipping)** | **Phenotype of offspring** |
| Gender | XX | XY |  |  |
| Skin color | Tt | Tt |  |  |
| Leg | Tt | Tt |  |  |
| Foot | Tt | Tt |  |  |
| Arms | Tt | Tt |  |  |
| Hands | Tt | Tt |  |  |
| Eye Color | Tt | Tt |  |  |
| Eyebrows | Tt | Tt |  |  |
| Beak | Tt | Tt |  |  |
| Ears | Tt | Tt |  |  |
| Antenna | Tt | Tt |  |  |
| Antenna shape | Tt | Tt |  |  |
| Tail | Tt | Tt |  |  |
| Wings | Tt | Tt |  |  |

Look around at the creatures for other groups. Do any of the creatures look the same?

*No, and they should not, even though all of the parents had the same genotype. This is because the creatures are determined by genotype of parents and by chance.*

List the dominant traits below.

*Short legs, webbed feet, long arms, paws, unibrow, trumpet beak, elephant ears, long antenna, knob antenna shape, no wings.*

List the recessive traits below.

*Long legs, talons, short arms, claws, separate eyebrow, crusher beak, mouse ears, short antenna, star antenna shape, wings.*

Are there any traits that are not dominant or recessive? *Skin color, tails and eye color do not display typical inheritance. See lesson for explanation.*

**Blood Typing Lab Data Sheet** **NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Diagram, shape

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Column 1** | **Column 2** | **Column 3** | **Column 4** |
| **Mrs. Sanderson** | **Mr. Sanderson** | **Jill** | **Jack** |
| **Row A Anti-A serum**  **clumping occurs = +**  **nothing happens = -** |  |  |  |  |
| **Row B Anti-B serum**  **clumping occurs = +**  **nothing happens = -** |  |  |  |  |
| **Blood Type (Phenotype)**  **(A, B, AB or O)** |  |  |  |  |
| **Possible Genotype**  **(AA, AB, BB, AO, BO, OO)** |  |  |  |  |

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