Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_ **Plastics Pre-Assessment**

## Answer the questions below about plastics, and rate your confidence level for each answer. This will not affect your grade in any way—we want to see what you already know about plastics. (QuestionPress.com sharecode: RWCUTQ)

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Question** | **Your answer** | **Your confidence level**  **1= I’m guessing**  **2= I might be right**  **3 = I’m sure I’m right** |
| 1 | True or False: The metals used in cell phones are abundant and easy to mine. |  |  |
| 2 | True or False: The plastics used in cell phones and cell phones cases are disposable and harmless. |  |  |
| 3 | True or False: Plastics decay quickly. |  |  |
| 4 | Which of the following are examples of plastics?  A) PVC B) Nylon C) Teflon C) all of these |  |  |
| 5 | Plastic can be made from which of the following? (you may choose more than one)  A) plant starches B) fossil fuels  C) metal oxides D) rocks & minerals |  |  |
| 6 | Plastics are primarily composed of which elements?  A) phosphorus and sulfur B) calcium and oxygen  C) helium and neon D) carbon and hydrogen |  |  |
| 7 | Amylopectin (pictured below) is a \_\_\_.  A) monomer. B) polymer. C) dimer D) dodecamer |  |  |
| 8 | How does hydrochloric acid react with amylopectin (pictured above)?   1. HCl causes more branches to form. 2. HCl helps the carbon-rings to form. 3. HCl breaks down the branches. 4. HCl does not react with amylopectin |  |  |
| 9 | What are plasticizers?  A) additives to make plastic more flexible  B) additives to make plastic more brittle  C) additives to make plastic more acidic   D) additives to make plastic more basic |  |  |
| 10 | True or False: In my town, all of the plastic we use at home can be recycled. |  |  |
| 11 | What does the acronym STEM stand for? |  |  |
| 12 | How many different cell phones have you owned? |  |  |
| 13 | How many different cell phone cases have you owned? |  |  |
| 14 | On a scale of 1 to 5, how concerned are you about the environment? (5 = most concerned) |  |  |
| 15 | On a scale of 1 to 5, how familiar are you with the engineering cycle? (5 = very familiar) |  |  |