## Name: Dental Filings

**Directions:**  ***Before reading the article*,** in the first column, write “A” or “D,” indicating your agreement or disagreement with each statement. As you read, compare your opinions with information from the article. In the space under each statement, cite information from the article that supports or refutes your original ideas.

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| --- | --- | --- |
| **Me** | **Text** | **Statement** |
|  |  | 1. About half of the high school students in the U. S. have tooth decay.
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|  |  | 1. Amalgam dental fillings contain mercury and other metals.
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|  |  | 1. Composite resins, which are white, are used for dental fillings today.
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|  |  | 1. Monomers have the same properties than the polymers they form.
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|  |  | 1. Polymerization to form dental resins begins spontaneously when molecules of the monomer are present.
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|  |  | 1. Blue light is used by dentists to trigger polymerization.
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|  |  | 1. The polymer in dental resins attracts water.
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|  |  | 1. Hydroxyl (OH-) groups are attracted to water.
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|  |  | 1. Dental resins are reinforced with silica-based glass.
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|  |  | 1. Composite-resin fillings include dyes to match a patient’s tooth color.
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**Directions**: ***As you read***, complete the graphic organizer below to describe what you learned about the chemistry of composite resin dental fillings.

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| **Composite Resin Dental Fillings** |
| Why are they used? |  |
| What is the role of polymerization in creating the fillings? |  |
| Why is blue light used? |  |
| Why are particles of silica-based glass added to the dental resin? |  |
| How do coupling agents help create the dental resin? |  |

**Summary**: On the back of this paper, use information from the article to write a tweet (140 characters or less) about dental resins.