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Patterning
and Algebra
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## Activity 5 Assessment Investigating Algebraic Expressions

| Investigating Algebraic Expressions |  |  |  |
| :---: | :---: | :---: | :---: |
| Identifies the monomial represented by a model $3 h+3=9$ <br> "The hexagon represents $h$. So, the model represents $3 h$." | Identifies the algebraic expression represented by a model. <br> "There are 2 hexagons and 6 triangles, so the design represents $2 h+6 t . "$ | Evaluates expressions, given the value of each variable. $\begin{aligned} & h=5 \text { and } t=2 \\ & \begin{aligned} 2 h+6 t & =2 \times 5+6 \times 2 \\ & =10+12 \\ & =22 \end{aligned} \end{aligned}$ <br> "The value of the expression is 22. ." | Adds like terms to simplify an expression, then evaluates it when variables have decimal values. $\begin{aligned} & \text { Evaluate } 3 q+2 r+4 r+q \text { when } \\ & q=1.5 \text { and } r=2.2 \\ & \begin{aligned} 3 q+2 r+4 r+q & =3 q+q+2 r+4 r \\ & =4 q+6 r \\ & =4 \times 1.5+6 \times 2.2 \\ & =6+13.2 \\ & =19.2 \end{aligned} \end{aligned}$ <br> "The value of the expression is 19.2." |
| Observations/Documentation |  |  |  |
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