Activity 5 Assessment
Growth and Impact of Interest at Different Rates

| Growth and Impact of Interest at Different Rates |  |  |  |
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| Understands and calculates simple interest <br> Simple interest is money earned on an investment and money paid on a loan. <br> If I save $\$ 500$ for 3 years at $6 \%$ annual simple interest, the interest earned is: $\$ 500 \times 3 \times 0.06=\$ 90$ | Understands and calculates compound interest <br> Compound interest is interest earned on interest for an investment, or interest paid on interest for a loan. I use an online calculator. If I save $\$ 500$ for 3 years at $6 \%$ compound annually, the interest earned is $\$ 95.51$. | Understands the implications of interest on a loan <br> A person borrows $\$ 10000$ for 10 years and pays $8 \%$ interest. If the person pays simple interest, the amount owing after 10 years is $\$ 18000$. <br> If the person pays interest compounded annually, the amount owing after 10 years is $\$ 21$ 589.25. It costs much more to borrow money with compound interest. | Understands the effect of different compounding periods on a loan <br> A person owes $\$ 7000$ for 5 years and pays $15 \%$ interest. <br> If the interest is compounded annually, the amount owing after 5 years is $\$ 14079.50$. <br> If the interest is compounded daily, the amount owing after 5 years is \$14 816.72. <br> The amount owing increases faster when the compounding period is more frequent. |
| Observations/Documentation |  |  |  |
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