



Offered as a public service by  
the Office of the State Treasurer

**Beth Pearce**  
Vermont State Treasurer

109 State Street  
Montpelier, VT 05609-6200  
802 828-1452  
800 642-3191  
[www.VermontTreasurer.gov](http://www.VermontTreasurer.gov)  
[www.MoneyEd.Vermont.gov](http://www.MoneyEd.Vermont.gov)

This activity illustrates to children the concept of compound interest, the importance of consistently putting money away, and the reward for patiently letting their savings grow.



# Kids & Money: **The Doubling Penny Exercise**

**Ask your child whether they would rather have \$20 today or one penny today that is doubled in value every day for 30 days?**

Using the chart below, show your child how a penny eventually grows to more than \$5.3 million! Explain to your child what an interest rate is and how compound interest works. You can use the following description:

When you save money—that means you don't spend all of the money you have right now—you put some of the money away to spend later. By saving, over time you can eventually buy things that cost more than you would have been able to buy just from the money you have today. You can save money by putting it in a piggybank or you might have a savings account at your local bank or credit union. When you put money into a savings account at a bank or credit union, you will be paid something called interest. Interest is money you earn by letting others use it until you need it. So, not only do you put money away, but it slowly grows larger because you are receiving interest payments. For example, if I have \$100 in a savings account and I'm paid 5 percent interest each year, at the end of one year I will have \$105. If I keep my money and the interest payment in the savings account for another year I will earn another interest payment on both the \$100 and the \$5 my money has earned. That is called compounding interest. At the end of two years my money will grow to \$110.25

## Watch Your Money Grow!

|                                |                                |                           |                             |                             |                             |                                |
|--------------------------------|--------------------------------|---------------------------|-----------------------------|-----------------------------|-----------------------------|--------------------------------|
| <b>DAY 1</b><br>\$.01          | <b>DAY 2</b><br>\$.02          | <b>DAY 3</b><br>\$.04     | <b>DAY 4</b><br>\$.08       | <b>DAY 5</b><br>\$.16       | <b>DAY 6</b><br>\$.32       | <b>DAY 7</b><br>\$.64          |
| <b>DAY 8</b><br>\$1.28         | <b>DAY 9</b><br>\$2.56         | <b>DAY 10</b><br>\$5.12   | <b>DAY 11</b><br>\$10.24    | <b>DAY 12</b><br>\$20.48    | <b>DAY 13</b><br>\$40.96    | <b>DAY 14</b><br>\$81.92       |
| <b>DAY 15</b><br>\$163.84      | <b>DAY 16</b><br>\$327.68      | <b>DAY 17</b><br>\$655.36 | <b>DAY 18</b><br>\$1,310.72 | <b>DAY 19</b><br>\$2,621.44 | <b>DAY 20</b><br>\$5,242.88 | <b>DAY 21</b><br>\$10,486      |
| <b>DAY 22</b><br>\$20,972      | <b>DAY 23</b><br>\$41,943      | <b>DAY 24</b><br>\$83,886 | <b>DAY 25</b><br>\$167,772  | <b>DAY 26</b><br>\$335,544  | <b>DAY 27</b><br>\$671,089  | <b>DAY 28</b><br>\$1.3 MILLION |
| <b>DAY 29</b><br>\$2.7 MILLION | <b>DAY 30</b><br>\$5.4 MILLION |                           |                             |                             |                             |                                |

Discuss the importance of consistently putting money away (saving) and patiently letting it grow. If your child doesn't already have a savings account, consider opening a small account at a local financial institution. You could match the money your child places in the account as an added incentive to save.