

ACTIVITY 3: INTEREST

ANNUAL VS. DAILY COMPOUNDING

The more frequently interest compounds, the faster it grows.

Annual Compounding	Daily Compounding
<p>Start with \$1,000 at 5%, compounded annually</p> <p>At the end of the first day, still \$1,000</p> <p>At the end of the year, \$1,050.00 – \$50 or 5% of \$1,000 added to the original deposit</p>	<p>Start with \$1,000 at 5%, compounded daily</p> <p>At the end of the first day, \$1,000.14</p> <p>On the second day, add the interest earned, 14 cents, and compound the total amount – \$1,000.14</p> <p>At the end of the year, \$51.27 is compounded and added to \$1,000.00 for a total after one year of \$1051.27</p>
Total: \$1,050.00	Total: \$1,051.27

COMPOUNDING INTEREST OVER TIME

	5 years	10 years
Mattress–NO interest	\$1,000	\$1,000
Annual compounding at 5%	\$1,276	\$1,629
Monthly compounding at 5%	\$1,283	\$1,647
Daily compounding at 5%	\$1,284	\$1,649

14 cents adds up over time when compounded daily!