## **Investigation 1: Interest Earned on Investment**

**Simple Interest:** Interest that is applied to a principal (starting) investment amount.

Ex: \$1000 is invested and 5% per annum simple interest is paid.

- the 5% has to be divided over the 12 months
- even as interest is earned, each month's new interest continues to be earned on the starting \$1000 only.

Complete the table below.

Month	Start	Interest	End
1			
2			
3			
4			

**Compound Interest:** Interest that is applied to the principal *and* the interest already earned.

Ex: \$1000 is invested and 5% per annum compound interest is paid.

- the 5% has to be divided over the 12 months
- as interest is earned, the next month's interest is based on the most recent month's total balance.

Complete the table below.

Month	Start	Interest	End
1			
2			
3			
4			

Write the sequence for end of month amounts.

Write the sequence for end of month amounts.

What type of sequence is this?

What type of sequence is this?

Write the general formula for this sequence.

Write the general formula for this sequence.

Simple Interest Formula

**Compound Interest Formula**