LEVEL 3

Use your answers to guide you to the end
of the maze to make your escape.
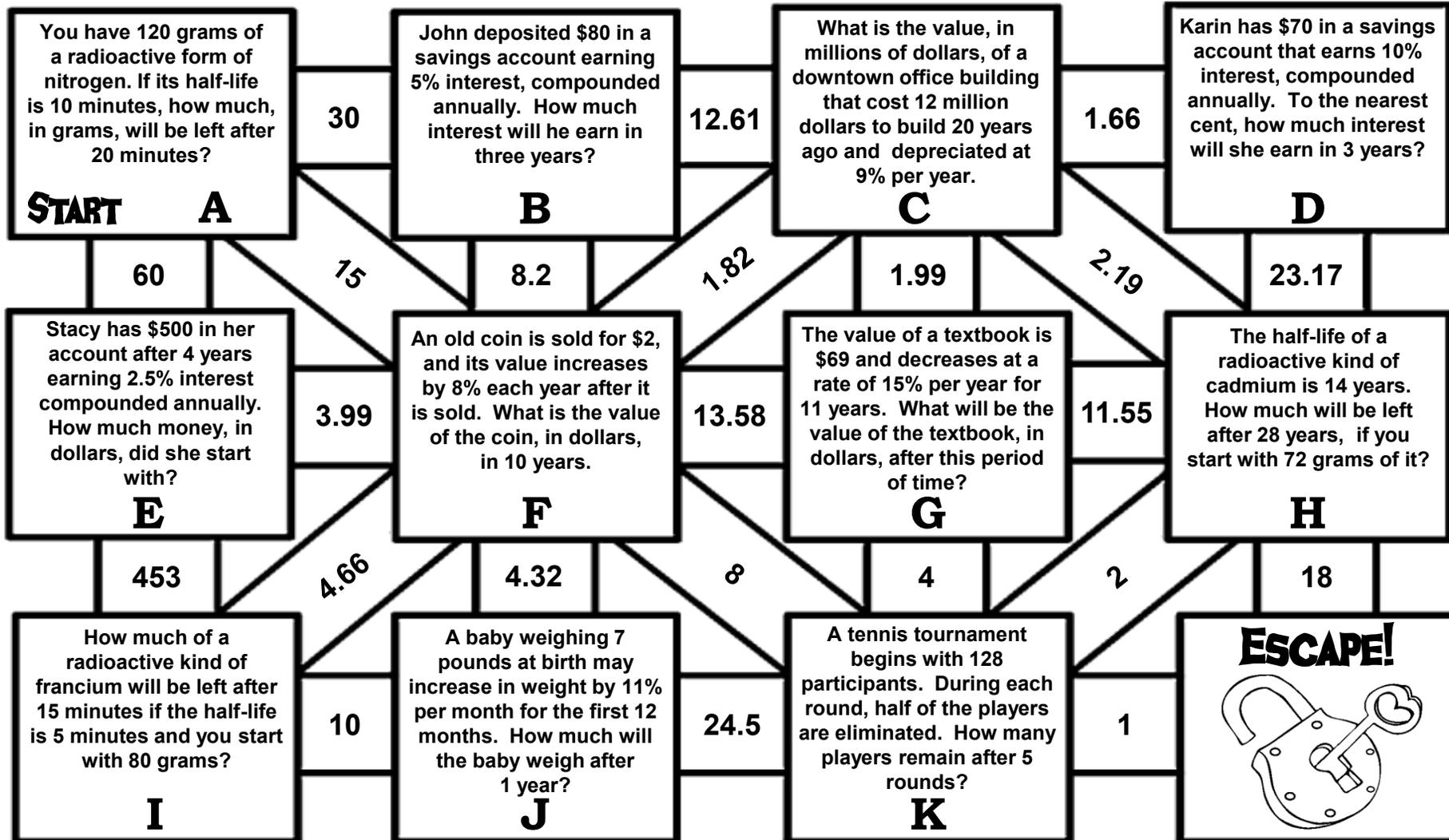
A You have 120 grams of a radioactive form of nitrogen. If its half-life is 10 minutes, how much, in grams, will be left after 20 minutes? **START**	30	**B** John deposited $80 in a savings account earning 5% interest, compounded annually. How much interest will he earn in three years?	12.61	**C** What is the value, in millions of dollars, of a downtown office building that cost 12 million dollars to build 20 years ago and depreciated at 9% per year.	1.66	**D** Karin has $70 in a savings account that earns 10% interest, compounded annually. To the nearest cent, how much interest will she earn in 3 years?

60	15	8.2	1.82	1.99	2.19	23.17

| **E** Stacy has $500 in her account after 4 years earning 2.5% interest compounded annually. How much money, in dollars, did she start with? | 3.99 | **F** An old coin is sold for $2, and its value increases by 8% each year after it is sold. What is the value of the coin, in dollars, in 10 years. | 13.58 | **G** The value of a textbook is $69 and decreases at a rate of 15% per year for 11 years. What will be the value of the textbook, in dollars, after this period of time? | 11.55 | **H** The half-life of a radioactive kind of cadmium is 14 years. How much will be left after 28 years, if you start with 72 grams of it? |

453	4.66	4.32	8	4	2	18

| **I** How much of a radioactive kind of francium will be left after 15 minutes if the half-life is 5 minutes and you start with 80 grams? | 10 | **J** A baby weighing 7 pounds at birth may increase in weight by 11% per month for the first 12 months. How much will the baby weigh after 1 year? | 24.5 | **K** A tennis tournament begins with 128 participants. During each round, half of the players are eliminated. How many players remain after 5 rounds? | 1 | **ESCAPE!** |