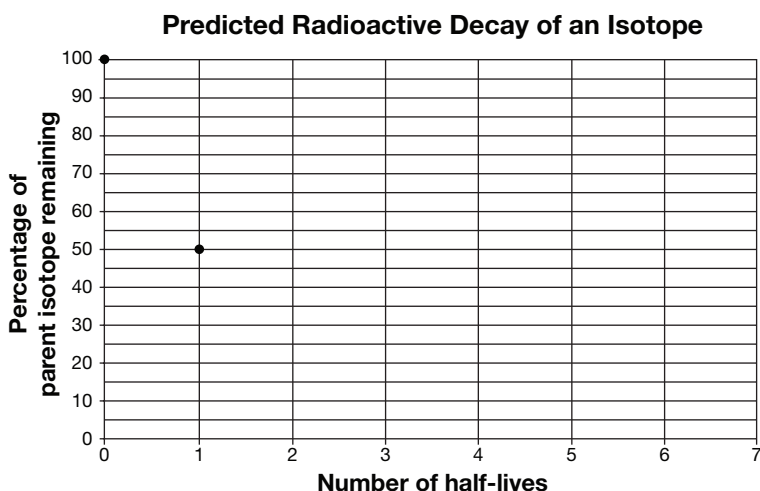


# Artifact Ages Worksheet

## Graph



## Results Table

Artifact Label	No. of Parent Isotopes	No. of Daughter Isotopes	Original No. of Parent Isotopes (P + D)	Percentage of Original Parent Isotopes Remaining	No. of Half-lives	Age of Artifact (years)

## Post-Lab Analysis and Questions

1. Assuming there were no daughter isotopes in the original artifact sample (when the artifact was made), determine the total number of parent isotopes in the original sample (parent + daughter) for each artifact. Enter the data in the results table.
2. Calculate the percentage of original parent isotopes remaining in each artifact by dividing the number of parent isotopes in the sample by the original number of parent isotopes and then multiplying by 100. Record the percentage in the results table.
3. Using the graph above, determine the number of half-lives for each sample. Record in the results table.
4. Multiply the number of half-lives by the half-life of the parent isotope from the *Experiment Overview* section to estimate the age of each artifact. Record in the results table.
5. Which excavated layer number contained the oldest artifact? Which contained the most recent?

