Topic: Chicago Butterfly life spans
Goal(s): 6,8,10
Skills: Calculate number ranges
Organizing, analyzing, interpreting and graphing data

What's the context?
Discovering facts about life spans of butterflies that live in the Chicago area.

Which data will students use?
Chicago Butterfly Facts

What will students learn from this project?

Know how – what will they be able to do better?
Creating number ranges.
Create bar and line graphs.

Know what – what idea(s) will they clarify through the project?
Gain an understanding of patterns and trends in a set of numbers by analyzing number ranges and by creating visual representations of these patterns and trends with graphs.

What's the challenge?
1). Analyze the facts on the data sheet relating to different species of butterflies that can be found in the Chicago area.
2). Choose five species of butterflies and calculate their minimum and maximum average life spans. (life begins the moment the eggs have been laid…lets avoid a philosophical argument!)
 • For example, the minimum time requirements for the four stages of life for a Black Swallowtail are; 4 days for the egg stage, 21 days for the larval stage, 10 days for the pupal stage, and 6 days for the adult stage, which means the minimum amount of time a Black Swallowtail can go through the four stages of its life is 41 days. Using this same method, the maximum amount of time this butterfly can complete the stages of its life would be 74 days, which leaves a range of 41 – 74 days.
2). Think of a way to creatively plot this information on a bar graph.

Checkpoint: Students can check each other's work and compare their bar graphs to check for clarity, then work in pairs to classify butterflies by habitat.