

Butterfly Memory Game

Discover Alaska butterflies with a memory game!



Materials Needed:

Two color copies of Butterfly Memory Cards (or draw your own), scissors, cardstock, glue.

Prepare Your Cards:

Print the butterfly memory cards directly on cardstock, or print on plain paper and glue to cardstock. Cut out all 12 pairs (24 cards in total) along the solid lines.

How To Play:

Lay the 24 cards face-down. Take turns flipping over two cards. If the two cards match, the player keeps the pair and goes again. If they don't match, the player leaves the cards where they are and turns them face-down again. The next player takes their turn.

Continue playing until the cards have all been matched and collected. The player with the most pairs is the winner.

To adapt the game for younger children, play with fewer pairs. Choose butterflies that look the most different from each other.

Look at the butterfly cards and discuss what you see. What kinds of colors, shapes, and sizes do you observe?

Observe Butterflies:

There are about 80 different species of butterflies in Alaska. Keep an eye out for butterflies as the weather gets warmer! Do you recognize any of the butterflies from the game?

Right: Canadian Tiger Swallowtail (*Papilio canadensis*).



Butterfly Memory Cards



Canadian Tiger Swallowtail
Papilio canadensis



Giant Sulphur
Colias gigantea



Lively Clouded Sulphur
Colias philodice vitabunda



Arctic Skipper
Carterocephalus palaemon skada



Northern Marble
Euchloe creusa



Alaskan Blue
Plebejus idas alaskensis



Compton Tortoise Shell
Nymphalis j-album



White Admiral
Limenitis arthemis rubrofasciata



Mourning Cloak
Nymphalis antiopa



Arctic Anglewing
Polytonia faunus arcticus



Denali Bog Fritillary
Boloria eunomia denali



Philip's Arctic
Oeneis philipi

Note: This activity shows only some of around 80 butterfly species that live in Alaska. Images are not to scale.

Butterflies in Alaska

As spring approaches and the days get longer and warmer, you can start to see butterflies in the air. There are about 80 species of butterflies in Alaska.

They have many adaptations to help survive in cold Arctic environments:

Overwintering: In the winter, Arctic butterflies will go dormant, lying inactive under the snow until warm weather returns. Different species may overwinter as eggs, larva (caterpillars), pupae (chrysalises), or adults.

In Alaska, six butterfly species in Alaska overwinter as adults, including the Compton Tortoise Shell, Mourning Cloak, and Arctic Anglewing. They produce a special anti-freezing chemical that prevents ice crystals forming in their bodies.



Right: Mourning Cloak (*Nymphalis antiopa*). Image: Wikimedia Commons.

Longer Life Cycles: A caterpillar cannot grow much in a short Arctic summer, so they live for several years as larva (hibernating in the winter) until they are big enough to develop into an adult butterfly.



Tiger Swallowtail
(*Papilio canadensis*)

Staying Warm: Butterflies need to absorb sunlight to stay warm. Each species has a preferred way of basking in the sun. Some spread their wings out, while others fold them at specific angles, or press their wings against sun-warmed rocks. Some species have dark wing patterns, which absorb more sunlight.

Did You Know? In Interior Alaska, the Compton Tortoise Shell (*Nymphalis j-album*) is one of the earliest butterfly species to emerge in springtime. You can sometimes see them while there is still snow on the ground!



Right: Compton Tortoise Shell. Image: KWP Lepidoptera Collection.

Discover more about Alaska butterflies and see photos of the Kenelm Philip Collection: kenphilipcollection.alaska.edu