

Libbie Hyman

Scientists and Inventors



twinkl



Aim

- To understand Libbie Hyman's work about classification.

Success Criteria

- I can describe Libbie Hyman's life and her work on invertebrates.
- I can classify invertebrates.
- I can describe the characteristics of invertebrates.

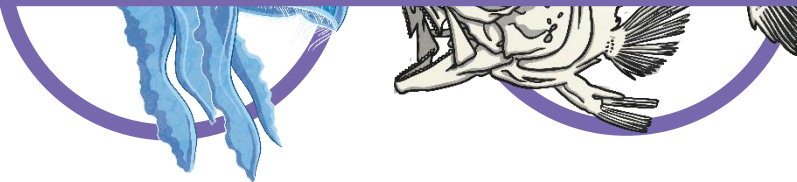
Vertebrates and Invertebrates



◆ All animals can be classified as either vertebrates or invertebrates. What is the difference?

◆ The difference between the two types of animals is that invertebrates do not have a backbone or spinal column.



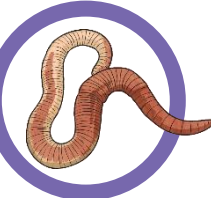
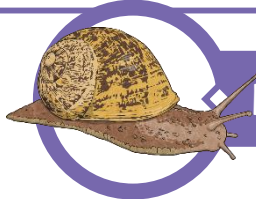
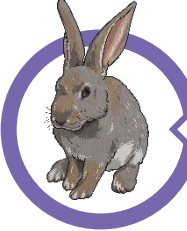


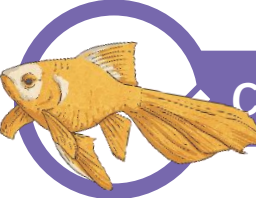

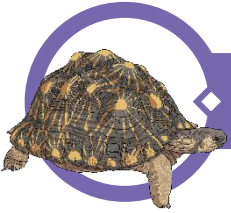

◆ Talk to your partner about the different phyla or classes of vertebrates and invertebrates that you can recall.



Vertebrates and Invertebrates



discuss any of these phyla or classes? Which of them are invertebrates?

-  **Class: Arachnids**
-  **Class: Amphibians**
-  **Phylum: Annelids**
-  **Phylum: Molluscs**
-  **Class: Mammals**
-  **Phylum: Echinoderms**
-  **Class: Birds**
-  **Class: Fish**
-  **Class: Insects**
-  **Class: Reptiles**
-  **Phylum: Crustaceans**

Libbie Hyman

◆ Libbie Hyman was a zoologist who researched vertebrates and invertebrates. She published highly detailed volumes of work about the characteristics and the taxonomy of invertebrates.

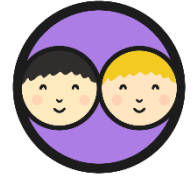
◆ Her work is widely regarded as an incredible achievement and is considered to be extremely important and useful for the study of different animals.

◆ She described the anatomy and characteristics of different vertebrates and invertebrates and explained how they should be classified.

◆ The books that she wrote are still used by scientists today.



Libbie Hyman Fact File



Use your **Libbie Hyman Fact File Activity Sheet** to answer their questions. Your partner will fill in their fact file with your answers.

When your partner is in role as Hyman, you should ask them the questions on your fact file. They will answer in role, and you can complete your fact file.



Libbie Hyman Fact File A

To understand Libbie Hyman's work about classification.



Work with a partner to complete your fact files.

1. Libbie Hyman was born in 1888 in Des Moines, Iowa, in the USA.
2. Who did Libbie Hyman live with while she was growing up?



3. Hyman's parents were Jewish immigrants. Her father was originally from Poland and her mother was from Germany.
4. What was Hyman's home life like?

5. As a child, Hyman was interested in nature, and collected moths and butterflies. She learned scientific names for flowers from her brothers' text books.
6. What did Hyman do after she graduated from high school?

7. Why did she eventually go to university?

8. At university, she wanted to study botany. However, she was put off by the anti-Semitic harassment (anti-Jewish bullying) that she encountered from a laboratory assistant. She studied zoology instead.
9. After she graduated, Hyman became a lab assistant. However, she was not free to pursue her career: her father had died and her mother still required Hyman to take care of the house for her and her brothers. Her mother disapproved of Hyman's scientific career.

The Invertebrates

She attended art classes so that she could illustrate her own work.

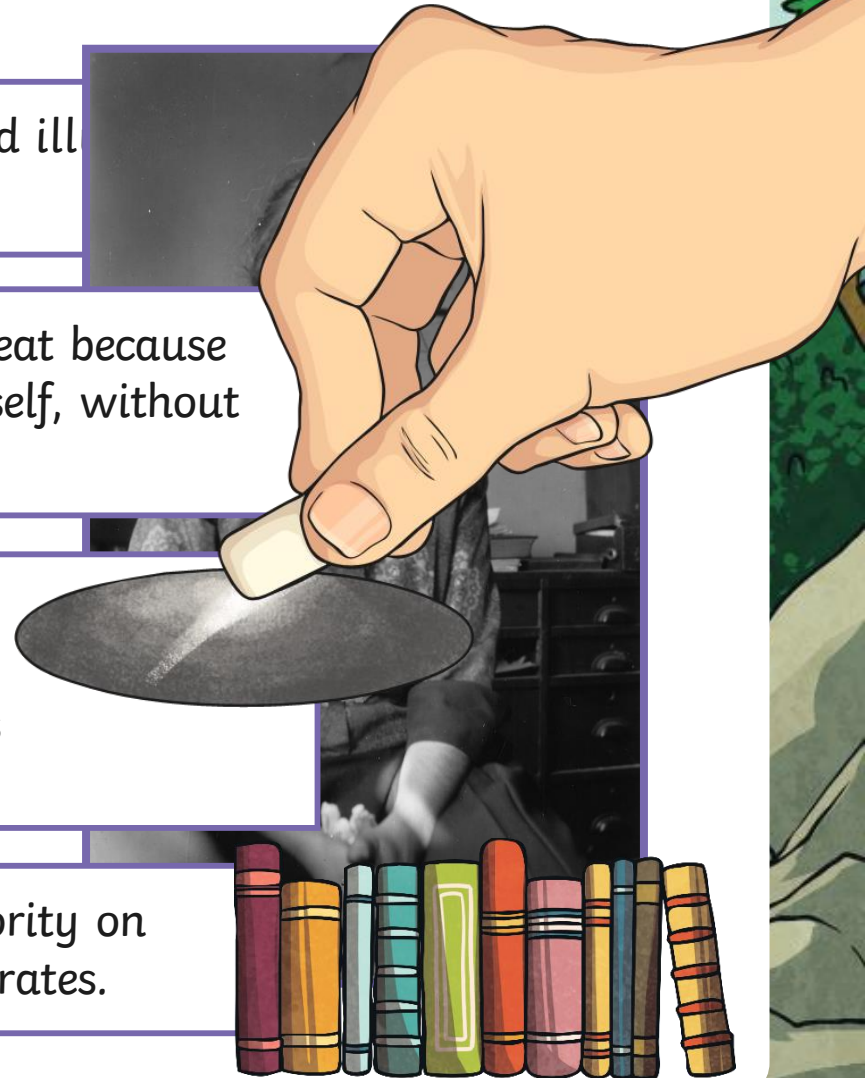
work on the classification of invertebrates

Her accomplishments are considered so great because she conducted this incredible work by herself, without a team of researchers or any partners.

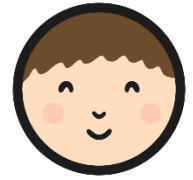
between 1940 and 1967. Human

She had no assistant or secretary, and typed every word of her books. This was very unusual and makes her achievements even more special.

Hyman's books are recognised as an authority on the anatomy and classification of invertebrates.



Invertebrate Information Page



Use your **Invertebrate Information Page Activity Sheet** to present your research.

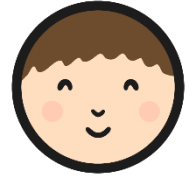
★ Invertebrate Information Page	
To understand Libbie Hyman's work about classification.	
◆ Name of invertebrate:	
◆ Illustration	◆ Habitat and Behaviour: Where does the invertebrate live? What does it eat? Does anything eat it?
◆ How is this invertebrate classified? Domain: _____ Kingdom: _____ Phylum: _____ Class: _____ Order: _____ Family: _____ Genus: _____ Species: _____	◆ Physical Characteristics: What does the invertebrate look like? What features does it have?

★★ Invertebrate Information Page	
To understand Libbie Hyman's work about classification.	
◆ Name of invertebrate:	
◆ Scientific name:	
◆ Illustration	◆ Habitat and Behaviour: Where does the invertebrate live? What does it eat? Does anything eat it?
◆ How is this invertebrate classified? Use the levels of the scientific classification system.	◆ Physical Characteristics: What does the invertebrate look like? What features does it have? How do these features help to classify it?

★★★ Invertebrate Information Page	
To understand Libbie Hyman's work about classification.	
◆ Name of invertebrate:	
◆ Scientific name:	
◆ Illustration	◆ Habitat and Behaviour
◆ How is this invertebrate classified?	◆ Physical Characteristics

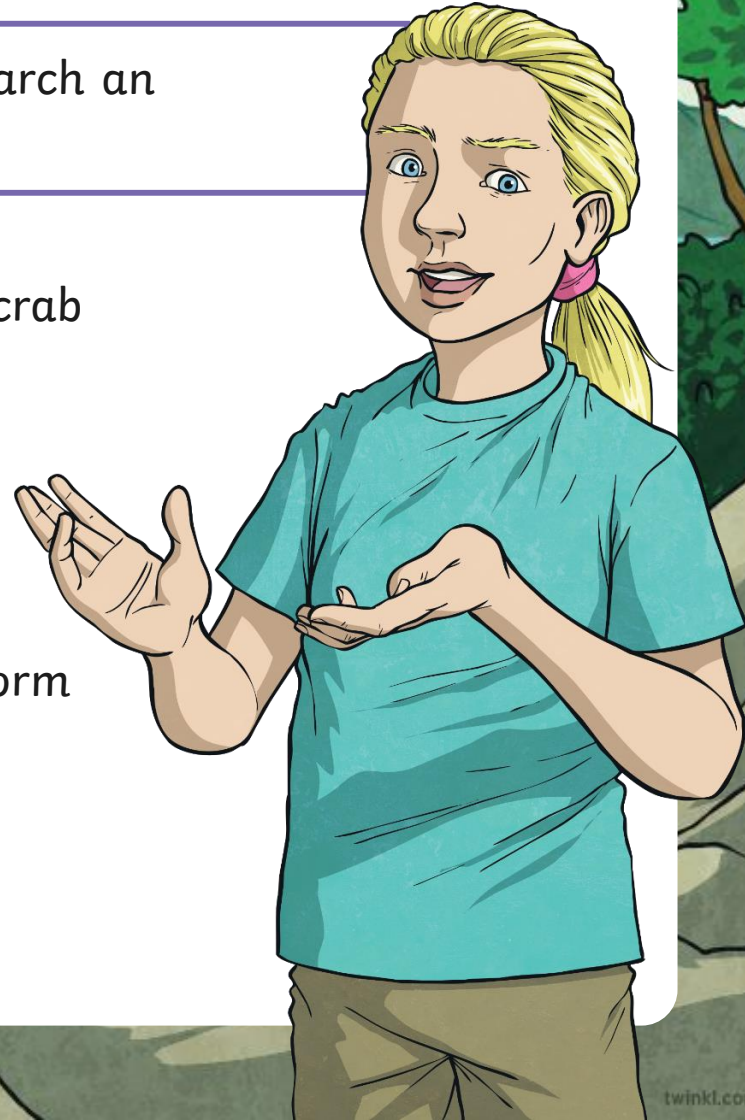
twinkl planit Science (Year 5, 6 and 7) Unit: Hyman's work about classification

Invertebrate Information Page



Choose from this list of invertebrates, or research an invertebrate of your own choice.

- ◆ seven-spot ladybird
- ◆ peacock butterfly
- ◆ lion's mane jellyfish
- ◆ emperor scorpion
- ◆ Japanese spider crab
- ◆ common octopus
- ◆ purple sunstar
- ◆ common earthworm



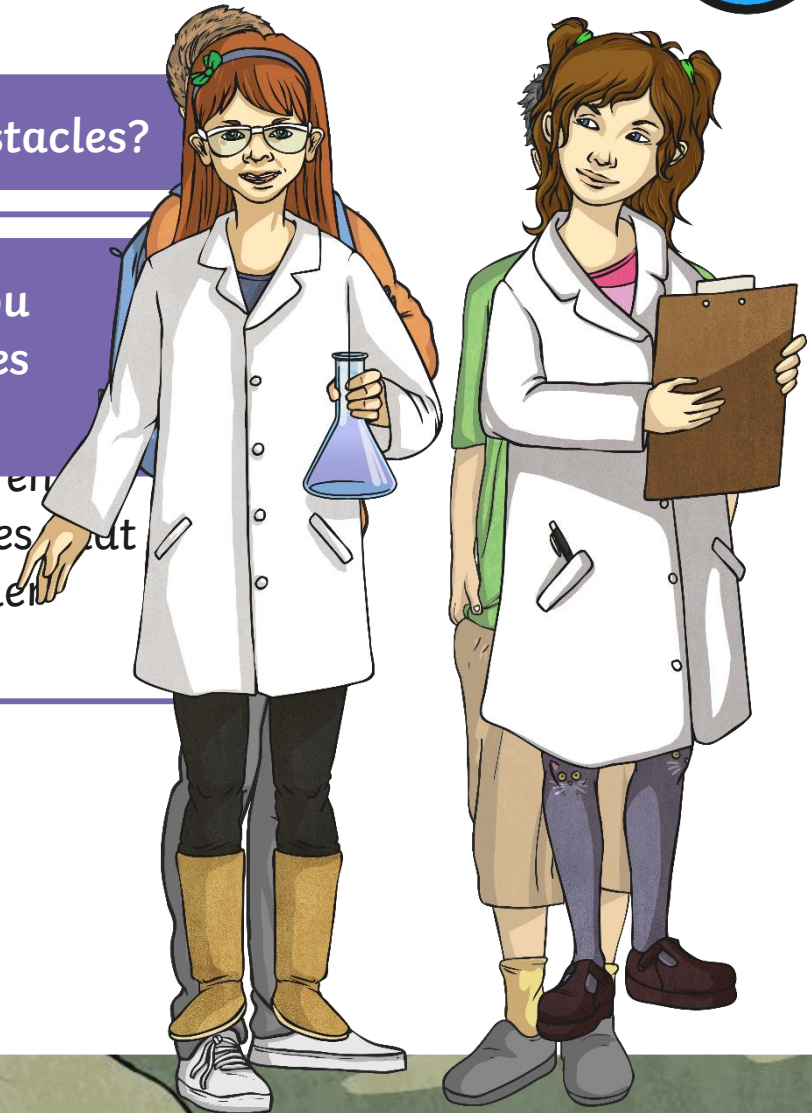
Attitudes and Obstacles



◆ How did Hyman overcome these obstacles?

◆ Hyman lived a long time ago. Do you think scientists face similar obstacles because of people's attitudes today?

◆ Talk to your partner about the different attitudes of her family and colleagues that could have prevented her pursuing her scientific career.



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