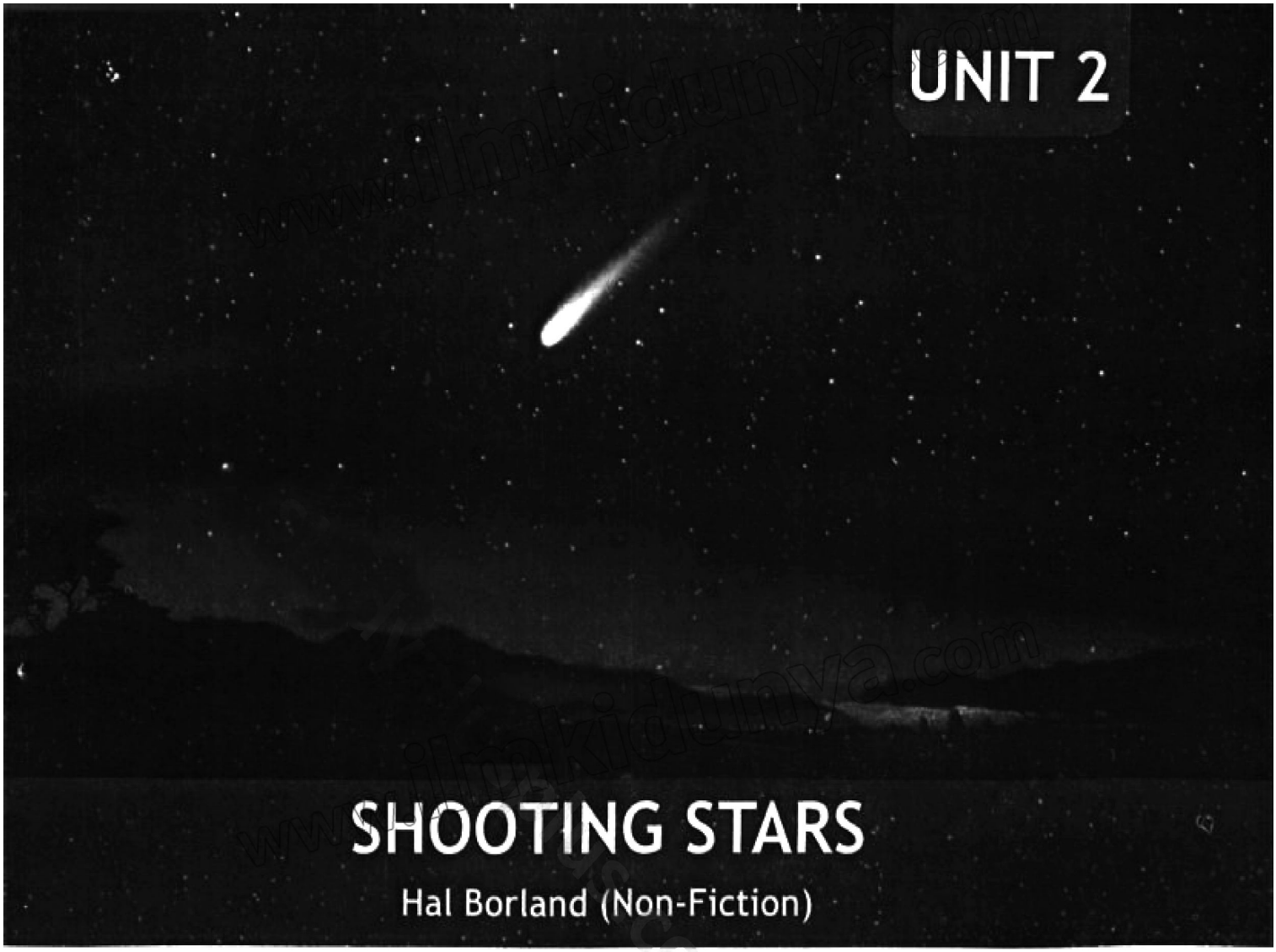

UNIT 2

SHOOTING STARS

Hal Borland (Non-Fiction)

After completing this lesson, students will be able to:

- use pre-reading and while-reading strategies to analyze and explore different layers of meaning read and use inference and deduction to recognize implicit meaning
- read to analyze descriptive /argumentative, persuasive essays
- extract salient points and develop a mind map to write informational text to understand about meteors
- respond to questions on a range of communicative purposes search for more relevant information concerning the unit
- consult general reference materials; dictionary, thesaurus for precise meaning/information
- use punctuation marks correctly
- understand and use noun and its kinds
- interpret the use of transitional devices in writing
- write informative texts to convey complex ideas, concepts of the content

Pre-Reading

- What do you know about a galaxy??
- How many planets are there in universe?

Most clear, dark nights you can see a shooting star, as we call it, if you keep looking. Those shooting stars are meteors. They are points of light that suddenly appear in the sky, like distant stars, race across the darkness, usually towards the horizon, and disappear.

For a long time, nobody knew what a meteor was but finally those who studied stars and the sky decided that a meteor was a piece of a comet that exploded long ago. Those pieces are still wandering about the universe in huge, looping paths that follow the original comet's orbit. There are uncounted pieces of such comets out there in the depths of space. Periodically clusters of them come close to the earth's orbit, or path around the sun. Most meteors are small, probably only a few inches in diameter, but when they enter the earth's atmosphere the friction makes them white-hot. Then they look big as stars streaking across the darkness.

There are half a dozen meteor showers each year. Each is named after the constellation from which it appears to come. The biggest of all, the Perseids, named for the constellation of Perseus, occurs on the 10th, 11th, and 12th of August. The next largest, the Leonidas, named for the constellation of Leo, comes on the nights of November 14, 15, and 16. Another, the Andromedids, which is not quite so big, comes from November 17 to 23. There are other meteor showers in December, January, April, May, and July, but none of them is as big as those in August and November.

While-reading

What are shooting stars?

Most people watching meteors will be satisfied if they see ten or twenty in an hour of watching. On special occasions, however, the meteors seem to come in droves. The most remarkable meteor shower 1 ever heard of was seen by a distinguished astronomer, Professor Denison Olmstead, of New Haven, Connecticut, on the night of November 12, 1833. He was watching the Leonidas, which seem to come from directly overhead and race downward toward the horizon in all directions. He reported that meteors fell "like flakes of snow. " He estimated that he saw 240, 000 meteors in nine hours that night. He also revealed that they ranged in size from mere streaks of light to "globes of the moon's diameter. " If he had not been a notable astronomer whose accuracy was beyond question, such statements would seem ridiculous. But there is no reason to doubt what he reported. He had seen one of the most unusual meteor showers ever reported. What he watched should be called a meteor storm rather than a mere shower.

I once watched the August Perseids with an astronomer on a hilltop in an open

country, and in two hours we counted almost a thousand meteors. That was the most I ever saw at one time. After that I tried watching for meteors in November and the most, I ever saw in November was about one hundred meteors in two hours of watching.

While-reading

Who is an astronomer?

The amazing thing about these meteor showers is that they come year after year. Professor Olmstead saw all those Leonidas in November of 1833, but if you watch for meteors this year you almost certainly will see them on the same nights that he saw them. They will come next year, the year after that, and for countless years more. Your grandfather saw them, and your grandchildren will see them if they look for them.

Occasionally, a meteor reaches the earth. Then it is called a meteorite and it is valued as a sample of the vast mystery of the deep space in the sky. Scientists examine it, try to guess what it was to begin with, where it comes from and what it is like out there. Nobody ever learned very much from the meteorites except that they often contain a great deal of nickel and iron.

Only a few large meteorites have struck the earth. The largest we know about, fell in Arizona (U. S. A) many centuries ago and made what is now called Meteor Crater, a hole about a mile across and 600 feet deep. Some Indian legends of the Southwest tell of a big fire that fell from the sky and ate a huge hole in the earth, so this big meteorite may have fallen since man first arrived in America, perhaps twenty-five thousand years ago.

Other big meteorites have fallen, in ancient times, in Texas (U. S. A), Argentina, northern Siberia, South-West Africa, and in Greenland. A meteorite weighing more than thirty-six tons was found in Greenland and now can be seen in the Hayden Planetarium in New York City. Millions of meteors have flashed across the night sky, but only a few large meteorites have ever reached the earth. Never in all the centuries of written history has there been a report of anyone being struck by a meteorite.

Post-reading

Have all the meteorites reached the earth?

Hal Borland (1900-1978), born in Sterling, Nebraska, was a naturalist, a person who studies animals and plants. He worked as a reporter for the *Denver Post* and the *Brooklyn Times*. He was also a writer of documentary film scripts, radio scripts, and other non-fiction. The National Audubon Society honored him by creating the Hal Borland Trail in Connecticut. Borland's essay "Shooting Stars" blends his fascination with nature and his ability to report facts in a clear, captivating manner.

Glossary

Given below are the difficult words from the unit. Look at their meanings and give synonyms of each in the given column. The first one is done for you. Also use these words in your own sentences.

Words	Meanings	Synonyms
horizon	the line that forms the apparent boundary between the earth and the sky	range of vision, skyline
friction	the rubbing of the surface of one body against another	
droves	large numbers; crowds	
meteors	falling stars	
comets	meteors	
periodically	annually, regularly	
constellation	system, variety, method	
revealed	opened, inform	
ridiculous	fantastic, funny	
perseids	any group of meteors that appears annually around August	
mystery	riddle	

Reading and Critical Thinking

a. Read the unit carefully and answer the following questions.

1. Define meteors?
2. When do the biggest meteor showers occur?
3. Describe the most unusual meteor shower ever reported.
4. Give the reason of attributing so much value to meteorites.
5. Explain the effect of the largest meteorite that fell to earth?
6. Why do you think scientists collect meteorites? What is it about meteors that stirs the imagination?
7. Describe the difference between a scientific explanation and an explanation offered by a legend or myth?
8. Can scientists learn something from legends or myths?

b) Fill in the blanks with the correct option:

I. There are_____meteor showers each year.

a) two dozen b) one dozed c) half dozen

ii. There are points of light that suddenly _____in the sky.

a) disappear b) appear c) become hazy

iii. A meteor reaches the earth _____

a) frequently b) occasionally c) randomly

iv. One can see a shooting star in_____

a) dark nights b) while raining c) cloudy weather

v. The most remarkable meteor was seen by a distinguished_____

a) astrologer b) astronomer c) scientist

vi. The largest meteor fell in _____

a) Venezuela b) Arizona c) Atlantic Ocean

Oral Communication

Acronyms are words which are made up of the initial letters of a group of words. The initial letters make a new word, which can be pronounced.

Sometimes the initials alone do not make a word which can be pronounced, so another letter is taken from one or more of the words in the group.

SUPARCO is an example of such a word. It stands for Pakistan Space and Upper Atmosphere Research Commission.

Acronyms should not be confused with abbreviations in which each initial letter is pronounced separately.

The following are abbreviations:

P-O-W (Prisoner of War)

O-A-P (Old Age Pensioner)

Activity

What do the following abbreviations stand for?

U.K W.H.O

What do the following acronyms stand for?

NASA RADAR LASER

Activity

- Search any incident about falling of shooting stars and share with the class.
- Divide the class into small groups.
- Instruct each group to prepare a presentation about shooting stars(meteors) using the information they gathered. Each presentation should include.
- Definition of meteors.
- Origin of meteors.
- The science behind the bright streak of light.
- Information about a famous meteor shower (the perseids).
- Images, diagrams (if they can arrange).

Vocabulary and Grammar

Silent Letters: A letter is silent if it is not produced. Examples include "p" in psychiatry, the "w" in write, the "m" in mnemonic, the "h" in vehicle in more.

Dictionary

It is a book explaining usually in alphabetical order, words of a language, or giving their equivalent, reference book of words and topics of subjects arranged in alphabetical order.

Most people think that dictionary has only one function to describe one words' meaning, but the dictionary has more functions.

1. Usage of words, meanings, pronunciation, parts of speech, synonyms/antonyms

Use of Dictionary

- To lookup the meaning of an English word
- To find the English translation of a word in your language
- To check the spelling of a word
- To check the plural of a noun in past tens of a verb
- To find out other grammatical information about a word
- To find the synonym and antonym of a word
- To check the part of speech of a word
- To find out how to say a word
- To find examples of the use of a word in natural language

Phonetic symbols

The phonetic symbols used in a dictionary can be viewed in Advanced Learner's Dictionary of Current English (6th edition);

Abbreviations and notations used: -

Abbreviations used:

Adj	=	adjective	v	=	verb
Adv	=	adverb	n	=	noun
Pp	=	past participle	us	=	American pronunciation

- **Find the given words in a dictionary and also write which part of speech they belong to?**

  welfare, potential, intimate, argue, ethnicity, diverse,

- **Punctuate the given lines**

  he was watching the leonids which seem to come from directly overhead and race downward toward the horizon in all directions he reported that meteors fell like flakes of snow

_____

_____

Use the following phrasal verbs in sentences.

get along _____

cross out _____

see to _____

break down _____

look after _____

Parts of Speech

The parts of speech explain how a word is used in a sentence. There are eight main parts of speech (also known as word classes): nouns, pronouns, adjectives, verbs, adverbs, prepositions, conjunctions and interjections.

Noun: A noun is a word that refers to a thing (book), a person (Betty Crocker), an animal (cat), a place (karachi), a quality (softness), an idea (justice), or an action (walking). It's usually a single word, but not always: cake, shoes, school bus are all nouns.

Kinds of Nouns

1. Proper Nouns.

Proper Nouns are used to refer to specific persons, places, or things. They always start with a capital letter. These nouns also refer to the names of the days of week and months, and also various names of organization, institution, religion, etc. Which are proper and specific. For Example:

Quaid-e-Azam Muhammad Ali Jinnah

Pakistan

Mount Everest

2. Common Nouns

Proper nouns refer to general, unspecific person, place or thing. For example:

boys girls chairs

3. Compound Nouns

A compound noun is a noun which contains two or more words which join together to make a single noun is called a compound noun. It can be written together, they can be hyphenated such as "Mother-in-law" or separate words such as "Post office".

For example

milkman lunchtime firefighter

4. Collective Nouns

A Collective noun is a noun which refers to a group of people or group of something in a specific manner or unit. Collective nouns can be either singular or plural, For example:

family audience fleet of ships

5. Concrete Nouns

A concrete noun is a noun that can be touched, smelled, seen, felt, or tasted.

Concrete nouns can be countable or uncountable, common nouns, proper nouns, or collective nouns can be concrete noun. For example:

plate ice book

6. Abstract noun is a noun denoting an idea, quality or state rather than a concrete object.

For Example:

truth danger happiness

Forming Abstract Nouns with Suffixes

Abstract nouns are frequently formed with the addition of suffixes.

Examples:

determined----------adjective

determination----------abstract noun with suffix---------tion

Examples of making abstract nouns with the suffixes are given below:

--------ness----------sadness, happiness

--------ism----------nationalism, sufism

--------ship----------relationship, leadership

--------ment----------punishment, excitement

--------tion----------exhaustion, friction

--------ity----------extremity, longevity

What is the difference among proper, concrete and abstract nouns? Give three examples of each.

- **Write three examples for these following parts of speech .**

Proper Noun _____

Common Noun _____

Compound Noun _____

Collective Noun _____

Concrete Noun _____

Abstract Noun _____

Writing

Transition words are like 'and', 'but', 'so' and 'because'. They show your reader the relationship between phrases, sentences, or even paragraphs. When they are used, they make it easier for the readers to understand how thoughts and ideas are connected. For example: equally important, again, finally, moreover, besides and secondly.

- **Write a paragraph on the "Benefits of Exploration of Universe". It should have transitional devices in it.**

Teacher's Point

- Help students in writing a paragraph with a use of transitional devices.