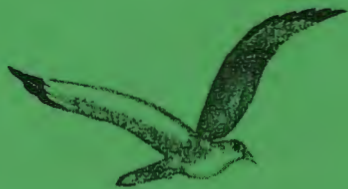


TEACHER'S EDITION  
FOR

# All Sails Set

REVISED



WORKBOOK

## Using an Index

Our next story is about the first Canadian airplane flight. If you are interested in airplanes, perhaps you would like to find out more about the early days of flying. One way to do so would be to look up topics that you are anxious to learn more about in a book on the history of flying.

In such a book there are usually two helps given, both of which will help you find topics that you want in a hurry. One to them is the table of contents.

Another help is the Index. The index appears at the back of the book. An index such as might appear at the end of a boys' history of flying is given below.

Aileron	50	Bladud	3	Langley	42
Airplanes, early	36-44	Bresnier	16	Legends about flying	1-7
Bresnier	16	Channel, English	52	Bladad	3
Damien	10	Carpet, flying	7	Carpet, flying	7
floating ship	14	Charles	24	Icarus	1
glider, first	16	Damien	10	Lilienthal	38
Lana	14	Engine, first use of	42	Montgolfier	24
parachute, idea of	9	Fins, principle of	32	parachute, idea of	9
Vinci, da	8	Fire, in balloons	18	Vinci, da	8
Balloons	17-28	Floating ship	14	World War I	55
Charles	24	Gas, in balloons	24	Wright Brothers	45-63
Fire	18	Gliders	16, 38	aileron	50
Gas	24	Icarus, legend of	1	airplane used	45
Montgolfier	24	Lana	14	Zeppelin	35

1. In what order are the topics of a book listed in its index? alphabetic
2. To what do the numbers after the topics refer? pages in book
3. Two numbers separated by a dash, like 36-44, mean "from page 36 to page 44."
4. On what page would you find information about the legend of Icarus? page 1

In hunting up a topic in an index, make use of the important single words of the topic. These important single words are called **key words**.

5. Suppose that you know that it was the Wright brothers who flew the first airplane. You want to find information about this first airplane. Under what key word will you find it? airplanes, early This topic will be on page 36-44.
6. Suppose that you know that a Frenchman named Montgolfier was the first to rise in a balloon that used fire to heat air to raise the balloon. You want to find out more about this fire balloon. One key word that would give you the page in this index is Montgolfier. Another key word that would give you the correct page is Fire, in balloons
7. Now list the titles of two books in your classroom library, each of which has an index.

(various)

(various)

## Important Steps in Conquering the Air


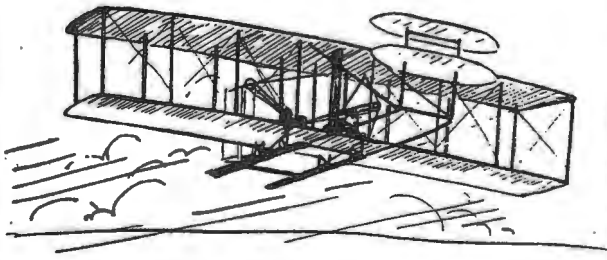

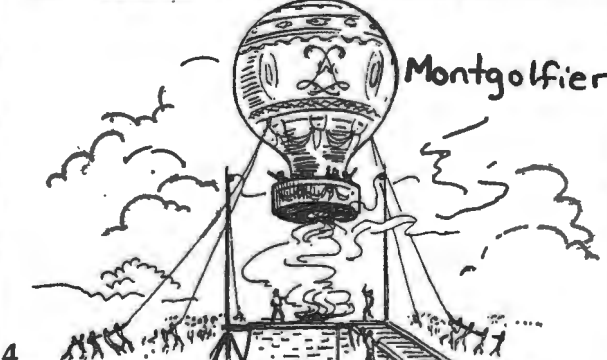
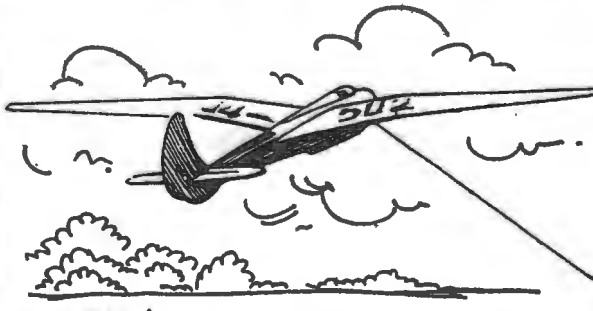
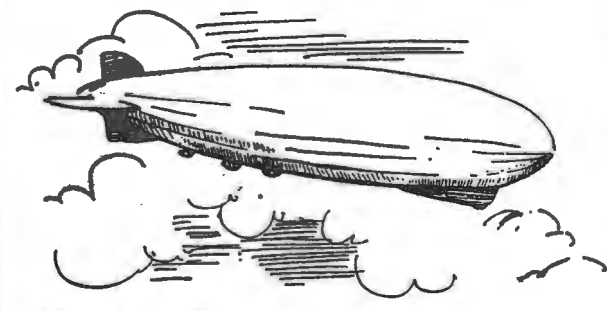
Some important steps in man's conquering of the air are drawn in the pictures below. These are the names that go with them.

Montgolfier  
glider

Icarus  
helicopter

Zeppelin  
Wright

Hunt up each of these six names in an encyclopedia or reference book on flying. Then write each name under the picture with which it goes. Perhaps you might also like to form a committee with other members of your class, and each of you bring in an oral report to the class on one of these steps.

 <p>1. helicopter</p>	 <p>2. Wright</p>
 <p>Icarus</p> <p>3.</p>	 <p>Montgolfier</p> <p>4.</p>
 <p>5. glider</p>	 <p>6. zeppelin</p>

## Prefixes Build New Words

### A.

Put a box around the root word in each of the words. Underline the prefix in each of the words. (As you copy the words, do not crowd the letters.)

- |                      |                       |                        |                          |
|----------------------|-----------------------|------------------------|--------------------------|
| 1. <u>dis</u> like   | 5. un <u>aw</u> are   | 9. <u>dis</u> agree    | 13. un <u>latch</u> ed   |
| 2. <u>imp</u> ure    | 6. <u>dis</u> trust   | 10. un <u>cert</u> ain | 14. <u>im</u> movable    |
| 3. <u>in</u> correct | 7. <u>in</u> accurate | 11. <u>im</u> modest   | 15. <u>in</u> convenient |
| 4. <u>un</u> steady  | 8. <u>im</u> patient  | 12. <u>dis</u> order   | 16. <u>in</u> complete   |

17. What four prefixes are shown in the words above? dis-, im-, in-, un-  
18. All of these prefixes have the same effect on the meaning of the word. What is it?

\* to make it mean its opposite

### B.

Again put a box around the root word and underline the prefix.

- |                      |                     |                           |
|----------------------|---------------------|---------------------------|
| 1. <u>pre</u> pay    | 5. <u>in</u> doors  | 9. <u>re</u> join         |
| 2. <u>pre</u> war    | 6. <u>in</u> land   | 10. <u>re</u> view        |
| 3. <u>pre</u> school | 7. <u>in</u> born   | 11. <u>re</u> adjustments |
| 4. <u>pre</u> view   | 8. <u>in</u> coming | 12. <u>re</u> capture     |

13. How does the prefix pre- change the meaning of each of the words in which it appears?

\* it makes it mean "before"

14. How does the prefix in- change the meaning of each of the words in which it appears?

\* it makes it mean "inside"

Notice the different meaning of in- here from that in A.

15. How does the prefix re- change the meaning of each of the words in which it appears?

\* it makes it mean "again"

### C.

Now change the meaning of each of the words in boldface type below by adding a prefix to it that will make the new word fit the meaning of the rest of the sentence. (Copy the entire word.)

- After the crash of the glider, the inventors patiently made some re adjustments to the wings that would improve its next flight.
- Since the days when Dr. Banting discovered insulin, diabetes is no longer an un treatable disease.
- Doctors should give pre school children the needle for diphtheria before the children start going to school.
- The first trials of the new drug were un satisfactory, because many of the laboratory dogs died from its use.

\* Wording may vary.

## Words With Similar Meanings

Match each word in the first column to a word in the second column that has a similar meaning.

- |                 |                           |
|-----------------|---------------------------|
| 1. journal      | A) <u>6</u> haul          |
| 2. modest       | B) <u>4</u> sample        |
| 3. intelligence | C) <u>1</u> magazine      |
| 4. specimen     | D) <u>5</u> show          |
| 5. demonstrate  | E) <u>2</u> humble        |
| 6. tow          | F) <u>3</u> understanding |

Two or more words which have similar meanings are called **synonyms**.

In each of the paragraphs below there are two synonyms for the third word which is printed in bold-face type below the paragraph. Write the two synonyms after the bold-face word.

- Originally the drug was so strong that it had to be diluted. In its pure form it made the patients ill. After it was watered it was safe to use on humans.  
thinned out: diluted watered
- The farmer carefully selected his best ears of grain. He wanted to win the title of Wheat King. He took those he had chosen and bound them into a sheaf for the fall fair.  
picked: selected chosen
- The trapper had never been to the city before. He hesitated at the revolving door of the hotel. It was spinning fast and sent him sprawling.  
turning: revolving spinning
- Close up, the helicopter seemed a very frail structure, with its windmill instead of wings. I had a chance to go up in it, but thought the risk was much too great in such a flimsy craft.  
easily broken: frail flimsy
- The jaded horses shambled into the barn. They were soft from the long winter. They were exhausted from the first day of the spring ploughing.  
wearied: jaded exhausted
- In China there is always a scarcity of food. There are too many mouths and too few acres of farmland. This scantiness of food means that somewhere in the land there is always a famine.  
shortage: scarcity scantiness

## Reading to Find Answers to Questions

### A.

Glance over the questions below before you start to read the story, "Louis Agassiz" (a' ga sē). These questions will guide you in what to look for as you read.

After you have read the story through, look back and see what questions can be answered. Answer these questions by putting the number of the line or lines on which the answers can be found. If a question cannot be answered from the story, put an X after it.

1. As a boy what was Louis' hobby? 3 or 5
2. What did Louis' father want him to become? 8
3. How old was Louis when he entered university? 9
4. When did the animals whose skeletons were hardened into stone exist on earth?  
15
5. When did Agassiz move to America? X
6. What great poet did honour to Agassiz? 19
7. What killed Agassiz? 21, 22 or 24
8. In what city of the United States was he buried? X

### LOUIS AGASSIZ

Louis Agassiz was born among the mountains, cataracts, and glaciers of 1  
Switzerland. His mind became concentrated early on the wonders of nature. As a 2  
little boy he spent most of his time roaming the land, collecting birds, insects, and 3  
animals. His mother had a hard time making his bed, because his room was so full 4  
of live and dead animals. When he was not hunting and collecting, Louis was 5  
studying the scientific names of these animals in books. Louis Agassiz' father 6  
shook his head over Louis' interest in science. Instead, he wanted Louis to become 7  
a businessman. 8

At ten Louis entered university. There he had to spend many weeks of his 9  
spare time copying by hand the expensive textbooks that he needed for his studies. 10  
Yet, by the time he was a young man, Louis was already famous all over Europe as 11  
naturalist. 12

Nature seemed to show Louis the secrets that she hid from other men. From 13  
the skeletons of fish and animals hardened in stone, Louis was able to describe 14  
animals that had existed on earth long ago. 15

Soon Louis Agassiz' fame spread from Europe to America. A great university in the United States sent for him to become a professor. There he established laboratories, summer schools, and collections of the wonders of nature. He wrote many books. A great poet, called Longfellow, wrote a poem and presented it to him at a birthday dinner held in his honour. Agassiz went on difficult journeys to Brazil and other far-off places to find new animals and plants. He gave himself no rest, and finally became ill. Yet he kept on working, saying: "I want rest. I am ready to go, but while I live I will work. While I have strength I will labour."

Worn out, Agassiz died. He was buried in the United States and for his grave a boulder was brought from a Swiss glacier. Famous as he was, he died poor. He had always said: "I am much too busy to make money."

B.

This piece about Agassiz tells us something about the character of this man, and about many other scientists like him.

Underline the word in each of the four lists below which fits Agassiz' character best. Then after it put a line of the story that seems to prove it.

1. Agassiz was: dull, ignorant, intelligent, careless

Proof: line 9

2. Agassiz was: curious, bore, uninterested, wrapped up in himself

Proof: line 3

3. Agassiz was: lazy, easy-going, hard-working, indolent

Proof: line 9, 10 or 22, 23

4. Agassiz was: selfish, greedy for wealth, foolish, unselfish

Proof: line 22, 23 or 25

5. Can you suggest two reasons why the stone that marked Agassiz' grave was a very suitable one?

a) \* He was born in Switzerland.

b) \* He was able to tell the story of stones.

\* Wording may vary.