
WINTER
SPRING
AUTUMN
SUMMER

1
00:00:00,500 --> 00:00:01,602
[■]

2
00:00:01,602 --> 00:00:03,237
Mars in a Minute

3
00:00:03,237 --> 00:00:05,506
How long is a year on Mars?

4
00:00:05,506 --> 00:00:09,176
The Earth zips around the sun
at about 67,000 miles per hour,

5
00:00:09,176 --> 00:00:12,279
making a full revolution
in about 365 days --

6
00:00:12,279 --> 00:00:13,614
one year on Earth.

7
00:00:14,281 --> 00:00:15,515
Mars is a little slower,

8
00:00:15,515 --> 00:00:17,017
and farther from the sun,

9
00:00:17,017 --> 00:00:20,287
so a full circuit takes
687 Earth days --

10
00:00:20,287 --> 00:00:21,622
or one Mars year.

11
00:00:22,356 --> 00:00:25,025
That longer year means
longer seasons, too.

12
00:00:25,025 --> 00:00:26,693

Over extended Martian winters,

13
00:00:26,693 --> 00:00:28,896
the shorter days and
reduced sunlight mean that

14
00:00:28,896 --> 00:00:30,631
solar-powered spacecraft
sometimes have to

15
00:00:30,631 --> 00:00:32,132
carefully conserve their energy.

16
00:00:32,132 --> 00:00:33,300
[battery chirps]

17
00:00:33,300 --> 00:00:35,435
Timing of Mars years
is also important.

18
00:00:35,435 --> 00:00:37,704
Every 26 months, we
come closer to Mars,

19
00:00:37,704 --> 00:00:40,374
so it's one of the best times
to send spacecraft.

20
00:00:40,374 --> 00:00:43,610
A shorter trip means less time
and fuel spent getting there.

21
00:00:43,610 --> 00:00:44,378
[■]

22
00:00:44,378 --> 00:00:44,711
[whoosh]

23
00:00:44,711 --> 00:00:46,647

When the Curiosity rover
got to Mars,

24
00:00:46,647 --> 00:00:50,317
its mission was to explore Mars
for at least 687 Earth days --

25
00:00:50,317 --> 00:00:51,919
one Mars year.

26
00:00:51,919 --> 00:00:53,620
But like our other
long-lasting rovers,

27
00:00:53,620 --> 00:00:56,256
it his its target
and kept on rolling!

28
00:00:56,256 --> 00:00:57,925
NASA Jet Propulsion Laboratory