



**A BOX OF TREASURE  
FROM ASTEROID  
RYUGU**

1  
00:00:00,233 --> 00:00:01,943  
[Mysterious music]

2  
00:00:01,943 --> 00:00:05,246  
[Narrator] Long ago, a fisherman  
named Urashima Tar█

3  
00:00:05,255 --> 00:00:08,758  
rescued a small turtle from a  
group of mischievous children.

4  
00:00:09,342 --> 00:00:12,746  
A few days later, a giant turtle  
greeted Urashima Tar█,

5  
00:00:12,746 --> 00:00:15,482  
and carried him beneath the sea  
to Ry█g█ Castle.

6  
00:00:16,082 --> 00:00:19,119  
There, Princess Otohime thanked  
Tar█ for rescuing

7  
00:00:19,119 --> 00:00:22,088  
the little turtle, and rewarded  
him with a mysterious

8  
00:00:22,088 --> 00:00:23,690  
box of treasure.

9  
00:00:23,690 --> 00:00:27,961  
[Music full]

10  
00:00:27,961 --> 00:00:29,662  
[Jazz music]

11  
00:00:29,696 --> 00:00:31,831  
[Graham] Today is really  
exciting, we're picking up a

12

00:00:31,831 --> 00:00:34,701  
bunch of samples from the  
asteroid Ryugu, and this is an

13

00:00:34,701 --> 00:00:37,737  
asteroid that was visited by a  
spacecraft from Japan.

14

00:00:38,138 --> 00:00:41,374  
This was the Hayabusa2 mission,  
and this is the second

15

00:00:41,374 --> 00:00:44,177  
mission of its kind that they've  
sent out to asteroids.

16

00:00:44,177 --> 00:00:46,746  
It's very similar to the  
OSIRIS-REx mission that

17

00:00:46,746 --> 00:00:49,182  
NASA has to the asteroid Bennu.

18

00:00:49,215 --> 00:00:51,518  
They went and visited this  
asteroid and they landed,

19

00:00:51,518 --> 00:00:54,654  
actually, two rovers on the  
surface to help them

20

00:00:54,654 --> 00:00:57,090  
figure out where they wanted to  
sample, and then brought

21

00:00:57,090 --> 00:01:00,093  
the samples back here to Earth  
December of 2020.

22

00:01:00,894 --> 00:01:03,396

Our partners at the Japanese  
Space Agency sent us a

23

00:01:03,396 --> 00:01:05,365

box full of samples from Ryugu.

24

00:01:05,398 --> 00:01:06,833

So the first thing we have to do  
is make sure

25

00:01:06,833 --> 00:01:08,435

that everything is okay.

26

00:01:08,435 --> 00:01:10,170

It would be really terrible to  
bring something

27

00:01:10,203 --> 00:01:12,205

that far away from space and  
then have something

28

00:01:12,205 --> 00:01:15,275

go terribly wrong in shipping  
from Japan to the US!

29

00:01:15,275 --> 00:01:17,677

So we just wanted to check  
everything out, make sure

30

00:01:17,710 --> 00:01:20,213

that the packaging was intact,  
that everything that was

31

00:01:20,213 --> 00:01:22,682

shipped was there, and that  
nothing was leaking

32

00:01:22,682 --> 00:01:25,218

and it was all fine – and then  
we put it in the freezer

33

00:01:25,218 --> 00:01:27,220  
for safekeeping.

34

00:01:27,220 --> 00:01:29,556  
So sample return mission is a  
really important

35

00:01:29,556 --> 00:01:31,257  
scientific activity.

36

00:01:31,257 --> 00:01:34,294  
Often when we think about space  
exploration we're thinking about

37

00:01:34,294 --> 00:01:37,931  
rovers and flyby missions, and  
we forget the true value

38

00:01:37,931 --> 00:01:40,900  
of just bringing things back  
into our analytical facilities

39

00:01:40,900 --> 00:01:42,902  
here on Earth, and that's  
something the scientific

40

00:01:42,902 --> 00:01:46,106  
community has been doing really  
well for a long time.

41

00:01:46,106 --> 00:01:49,142  
If you think about the Moon  
samples and solar particles,

42

00:01:49,142 --> 00:01:52,011  
and now asteroids are just some  
of the many samples that we're

