

# *Reading and Talking*

## Fish feelings

Cairns Aquarium in Queensland, Australia, has been closed since mid-March because of the coronavirus. Then staff noticed that some of the fish started behaving strangely. The fish seemed sad. One popular big fish stopped eating for a few weeks. Fish like having new things to look at and explore, both inside and outside their tanks. They missed seeing visitors to the aquarium. The brains of fish and humans are alike, so fish can get depressed, too. The aquarium has now hired one more diver to swim with the fish and keep them company.

(95 words)

Did you know that fish can get depressed?

↳ Yes, I did. (--Where did you learn about it? / Do you know a lot about fish? / Are you interested in “shinrigaku” psychology?)

↳ No, I didn't. (--Are you interested in fish? / Do you think fish go to sleep? / Do you like going to a “suizokukan” aquarium?)

Did you feel lonely during the “stay-home” period of the state of emergency?

↳ Yes, I did. / Kind of. (--Did your life change after the “hijoujitai sengen” state of emergency began on April 8? / Did you talk to family or friends using a video chat app like Zoom, Skype, or FaceTime?)

↳ No, I didn't. (--Did you have a lot of free time during the state of emergency? / Did you do anything special during Golden Week this year?)

Have you ever lived alone?

↳ Yes, I have. (--When and where did you live alone? / Did you like it? / What was the best thing and the worst thing about living alone?)

↳ No, I haven't. (--Do you want to live alone? / What is the best thing and the worst thing about living with your family?)

(May 29, 2020)

## *More information*

### Fish feelings

The Covid-19 virus has caused major changes in people's lives around the world. While it is well known that sudden change can make people anxious and depressed, it seems this kind of mental response isn't confined to humans.

Cairns Aquarium in Queensland, Australia, has been closed to the public since mid-March because of the coronavirus outbreak. One marine biologist there said, "Quite a few of the fish started behaving a little bit strangely, almost even sulking a little bit." One popular big fish stopped eating for a few weeks. This is because fish are curious animals that appreciate having new things to look at and explore, both inside and outside their tanks. As the expert noted, "Just people going past the exhibits is a form of stimulation for these animals."

Fish share a similar neurochemistry to humans. In the same way as humans, their depressive feelings are likely due to fluctuations in serotonin and dopamine. To help the fish deal with their depression, aquarium management decided to hire a third diver to swim with the fish and keep them company.

(182 words)

(May 29, 2020)

## *Reading and Talking*

### Japan's "Kounotori" spacecraft

On May 21st, Japan's Kounotori 9 unmanned cargo spacecraft was launched from the JAXA Tanegashima Space Center in Kagoshima Prefecture. It was taking science study equipment, batteries, clothes, food and water to the International Space Station (ISS). On May 26th at 9 p.m. Japan Time, 400 kilometers above the Earth, Kounotori 9 docked with the ISS. After about two months, Kounotori 9 is going to take old equipment and clothing from the ISS, then it is going to burn up when it comes close to Earth again.

(90 words)

Did you watch when Kounotori 9 docked with the ISS live?

↳Yes, I did. (--Where did you watch it? / How was it? / Are you interested in science?)

↳No, I didn't. (--Did you hear about Kounotori 9 before you read the story above? / Did you want to watch when Kounotori 9 arrived at the ISS? / Are you interested in the "uchuu" universe?)

Have you ever been to Tanegashima Island?

↳Yes, I have. (--When did you go? / Who did you go with? / Why did you go there? / How was it? / What was the best thing there?)

↳No, I haven't. (--Do you want to go there? / Have you ever been to Yakushima Island? / Have you ever been to the Ogasawara Islands?)

Have you gotten a package recently?

↳Yes, I have. (--Did you buy something? / Have you sent someone a package recently? / Have you ever had a job delivering things?)

↳No, I haven't. (--When did you last get a package? / Is there a "takuhaibin" home delivery center near your house? / Have you written a letter recently?)

(May 29, 2020)

## *More information*

### Japan's "Kounotori" spacecraft

On May 21, Japan's Kounotori 9 unmanned cargo spacecraft was launched from the JAXA Tanegashima Space Center in Kagoshima Prefecture to transport supplies to the International Space Station (ISS). It took five days to reach its destination, and on May 26 at 9 p.m. Japan Time, Kounotori 9 was successfully caught by a 17.6-meter-long robotic arm from the ISS. After about two months, Kounotori 9 is going to be loaded with used equipment and clothing, and then burn up when it reenters the Earth's atmosphere.

Kounotori ("stork" in English) started operating in 2009 (Heisei 21), and as the name suggests, the latest launch was the ninth mission to the ISS. Each time, it carries up to six tonnes of equipment for experiments, batteries, clothes, water, and food. It even takes fresh fruit and vegetables.

The International Space Station is run by NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada). It's the size of a football pitch. It flies at an average altitude of 400 kilometers above Earth, and it circles the globe every 90 minutes at a speed of about 28,000 km/h.

(189 words)

(May 29, 2020)