

ALL QUESTIONS WORTH 4 POINTS

## HONEY BEES AND THEIR PRODUCTS

Mat, Ema and Tica visited an apiary (bee farm) in the beginning of July. Mrs. Porter (Mat and Ema's mom) invited Tica to visit their house every three days.

The kids want to spend more time together, until July 25 when the Porters are going on holiday.



# 14<sup>th</sup> INTERNATIONAL KANGAROO SCIENCE CONTEST 2021

Ecolier Level (Class 3 & 4)

Time Allowed: 90 minutes

---

**1. What did the kids visit in the beginning of July?**

- A) a museum                      B) an apiary                      C) a park  
D) a forest                        E) a cave

**2. Where do the kids meet every three days?**

- A) at the apiary                      B) at the Zoo                      C) in the park  
D) at the Porters' house            E) at school

**3. What time did the kids meet when they went on the virtual tour?**

- A) 8:30                                B) 9:00                                C) 9:30  
D) 10:00                              E) 12:30

**4. When did the kids meet first time at Ema's house?**

- A) Friday, July 9                      B) Tuesday, July 7                      C) Monday, July 9  
D) Thursday, July 8                      E) Friday, July 7

**5. How many times do the kids meet in July?**

- A) twice                                B) three times                      C) four times  
D) five times                              E) six times

**6. What's the last day when they meet in July?**

- A) Tuesday, July 24                      B) Monday, July 22                      C) Tuesday, July 25  
D) Saturday, July 24                      E) Saturday, July 25

**7. Look at the picture. On the floor in the room there are .....**

- A) a book, clothes, a teddy bear  
B) two books, two slippers  
C) a shoe, a ball  
D) two books, a ball, a bee  
E) two books, two balls, a teddy bear

# 14<sup>th</sup> INTERNATIONAL KANGAROO SCIENCE CONTEST 2021

Ecolier Level (Class 3 & 4)

Time Allowed: 90 minutes

---

**8. How much time, till lunch, do the kids have for exploring online?**

- A) two hours
- B) two and a half hours
- C) three hours
- D) three and a half hours
- E) four hours

**9. When do people celebrate the World Bee Day?**

- A) May 20
- B) July 9
- C) July 25
- D) May 25
- E) July 15

**10. Who has a book about bees?**

- A) Mrs. Porter
- B) Tica
- C) Ema
- D) Mr. Porter
- E) Mat

**11. Before lunch, the kids need to .....**

- A) do homework
- B) tidy up the room
- C) read
- D) play
- E) eat

**12. On their virtual tour, kids will find out information .....**

- A) from books
- B) on internet
- C) on TV
- D) from their parents
- E) at the local store

# 14<sup>th</sup> INTERNATIONAL KANGAROO SCIENCE CONTEST 2021

Ecolier Level (Class 3 & 4)

Time Allowed: 90 minutes

Plants produce a sugar-rich liquid called nectar. Bees fly from flower to flower to collect nectar. Also bees pollinate. This happens when pollen is moved from one flower to another allowing the plant to create seed, which is often wrapped in yummy fruit.

Bees make honey from nectar and store it in the cells of the honeycombs. Depending on the types of flowers, honey can be colourless, golden, brown or reddish.



Manuka

Himalaya

Polyfloral

Linden

Acacia

Manna

Canola

Manuka honey comes from Manuka bushes which grow in New Zealand and Australia.

Himalaya honey is produced by the world's largest honey bees.

Polyfloral honey is produced by bees which pollinate crop flowers and wild flowers of different kinds.

Manna honey or forest honey does not come from the nectar of the flowers, but from the sap of the leaves and the trunks of the trees.

Honeycomb is a wax mass of hexagonal cells built by honey bees. The honeycomb cells are used for storing pollen, nectar, royal jelly and eggs.

Beeswax is obtained by melting the honeycomb and it is used for candles and healthcare products.



Pollen grains are carried by the bees on their back legs and then left at the hive entrance. People collect the pollen from here and use it as food or medicine.



Propolis, also called bee clay, is stored on the inner walls of the hive, and protects it from diseases and predators. People collect propolis and use it as medicine. Propolis is also a natural antibiotic.

Bee bread is derived from the pollen collected by honey bees and deposited in the honeycombs. The bee bread is dark brown in colour and a bit sour in taste. People use it because of its nutritional and medicinal properties.



Royal jelly is the food of the adult queen and the bee brood and it has excellent healing properties. People collect the royal jelly from the honeycombs with great difficulty.



Bee venom is produced by the working bees in order to protect themselves from predators. The bee venom is used to make medicine, and it is quite difficult to collect it. It takes 4,000 bees to get one gram of venom.

# 14<sup>th</sup> INTERNATIONAL KANGAROO SCIENCE CONTEST 2021

Ecolier Level (Class 3 & 4)

Time Allowed: 90 minutes

---

**13. Bees produce honey from**

- A) nectar                                      B) pollen                                      C) propolis  
D) wax    E) water

**14. Look at the picture. What types of honey are black in colour?**

- A) Himalaya and polyfloral                      B) manuka and manna  
C) manuka and Himalaya                      D) manna and linden  
E) manuka and polyfloral

**15. Which type of honey is mainly produced in Australia?**

- A) Himalaya                                      B) manna                                      C) manuka  
D) linden    E) polyfloral

**16. Where does the beeswax come from?**

- A) honey    B) pollen                                      C) nectar  
D) honeycomb                                      E) leaves

**17. What do bees store in honeycombs?**

- A) honey, bee bread, propolis                      B) eggs, honey, propolis  
C) eggs, bee bread, propolis                      D) bee brood, honey, propolis  
E) eggs, honey, royal jelly

**18. How do bees bring pollen to the hive entrance?**

- A) on their legs                                      B) on their wings                                      C) in their mouth  
D) on their antennas                                      E) on their stings

**19. Why do bees deposit propolis in the hive?**

- A) to protect hive from predators                      B) to eat it  
C) to lay eggs    D) to store honey  
E) to build honeycombs

# 14<sup>th</sup> INTERNATIONAL KANGAROO SCIENCE CONTEST 2021

Ecolier Level (Class 3 & 4)

Time Allowed: 90 minutes

---

## 20. Where do bees deposit the bee bread?

- A) in honeycombs
- B) on the hive roof
- C) at the hive entrance
- D) on the inner walls of the hive
- E) on their feet

## 21. Where does pollen come from?

- A) flowers
- B) royal jelly
- C) leaves
- D) hive
- E) honeycomb

## 22. Bees get pollen and nectar from flowers. How do bees help flowers?

- A) They water them.
- B) They pollinate them.
- C) They protect them from the wind.
- D) They dry them.
- E) They don't help them at all.

## 23. People use bee products mainly for.....

- A) animal food
- B) food and healthcare
- C) building houses
- D) making furniture
- E) making clothes

## 24. Which of these products are hard to get?

- A) honey and beeswax
- B) beeswax and pollen
- C) royal jelly and bee venom
- D) honey and propolis
- E) propolis and honeycomb

