

Approach: One to one
 Focus: Plant adaptation
 Resources: 3 pictures, bidibid seeds

Questions / instructions:



In this activity we'll be talking about how different seeds are spread.

Show student picture 1: dandelion.

1. How do you think the dandelion's seeds are helped to spread?

wind 57 (72) 86 (82)

If necessary tell student that dandelion seeds are spread by the wind.

2. What is special about the way dandelion seeds are made that help them get spread by the wind?
 lightness
 fluffy bits to get caught by wind
 parachute/umbrella effect for landing

20 (30) 36 (35)
 20 (26) 35 (26)
 6 (9) 18 (14)

3. What might be good about seeds being spread by the wind?
 can travel a long way/land in good growth environment
 other valid, well-explained reason

17 (19) 36 (36)
 11 (20) 13 (10)



Show student picture 2: miro berry.

4. How might the seeds of the miro berry be spread?

eaten and spread in bird or animal droppings 2 (6) 18 (17)
 eaten by animals/birds 10 (14) 23 (17)
 by animals/birds 5 (10) 11 (15)

If necessary tell student that miro berry seeds are sometimes eaten by birds and other animals and the seeds are spread in the droppings.

5. What is special about the way berry seeds are made that help them get spread by birds or other animals?

colour to attract bird 9 (11) 22 (36)
 nice flavour, good food 16 (21) 26 (36)
 hard seeds that survive being eaten/digested 1 (4) 9 (4)

6. What might be good about seeds being spread in bird or other animal droppings?

can travel a long way/land in good growth environment 11 (11) 32 (28)
 droppings fertilise seeds 5 (11) 13 (17)
 other valid, well-explained reason 7 (7) 11 (7)

Show student picture 3: bidibid and packet of bidibid seeds.



7. These seeds belong to the bidibid family. How do you think bidibid seeds are spread?

caught on moving creatures 9 (15) 38 (45)

If necessary tell student that the seed clings to animals or clothing.

8. What is special about the way bidibid seeds are made that help them get spread by clinging to fur or clothing?

hooks/barbs grab strongly onto fabric/fur (hard to get off) 2 (5) 9 (6)
 prickles/spikes get into fabric/fur (but relatively easily brushed off) 46 (65) 53 (59)

9. What might be good about being spread by clinging to animal fur or clothing?

can travel a long way/land in good growth environment 13 (26) 38 (32)
 other valid, well-explained reason 5 (2) 8 (10)

10. What might be not so good about seeds being spread by the wind, in animal droppings or on animal fur?

a lot end up in places where they won't grow well 4 (10) 16 (15)
 they are a nuisance; end up in places where they are not wanted 23 (24) 46 (36)

Total score: 11-16 1 (3) 12 (12)
 8-10 5 (11) 29 (30)
 5-7 18 (31) 34 (28)
 2-4 51 (43) 19 (20)
 0-1 25 (12) 6 (10)

Commentary:

This task was difficult for most year 4 students, with only 24 percent getting more than one quarter of the maximum score. By contrast, 75 percent of year 8 students achieved that. There was no meaningful change between 1999 and 2003 for year 8 students, but a clear decline in performance of year 4 students.