

Name

2016

Points

87 D

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Municipality \_\_\_\_\_

School



a) Name the berry plants in the pictures (1-7).



 d) Connect corresponding flowers and berries. Write the letter of the flower (B-F) in the red box.





 f) Where on the map would you most likely get the best harvest of different berries? Connect the habitats to the berries and write the letters (A-D) in the boxes.



b) What is the function of a berry for the plant itself?

c) Abundant flowering bodes for a good berry harvest. Which part of the plant develops into a berry? Please tick the correct alternative.



- e) A lot of research has been done on the health effects of berries.
  Connect the health claims to the berries. Write the number
  of the health claim (1-7) in the blue box.
  - 1. One decilitre is enough to satisfy the daily need for vitamin C. Seed oil is ideal for skin care. Abundant in northern bogs.
  - 2. Contains three times more vitamin C than orange. Thorns make collecting difficult.
  - 3. Good for urinary tract health. Best time to pick is after the first frosts.
  - 4. Of all our berries, contains the highest amount of antioxidants which protect our bodies against diseases.
  - 5. High in fiber and a good source of vitamin E. Contains large amounts of benzoic acid, a natural preservative that makes the berries stay fresh long. Subshrub of a dry boreal forest.
  - 6. This berry is said to be superfood. Contains blue anthocyanins that help with problems resulting from aging and are good for eye health as well.
  - 7. A berry that tastes sweet and smells good. Contains a lot of fiber and antioxidants. A shrub often found in clear cut areas.



27 p

THE WHITE-BACKED WOODPECKER is the most endangered forest bird species in Finland. It prefers bright deciduous forests. It doesn't prosper in dense coniferous forests. The white-backed woodpecker pecks into decaying deciduous trees in search of insects. This creates funnel-shaped holes on the trunks.

- a) Identify these woodpecker species, and write the corresponding letters (B, W and G) in the boxes.
  B = Black woodpecker W = White-backed woodpecker G = Great spotted woodpecker
  - b) Use the diagram and maps to describe the development of the population and distribution of the white-backed woodpecker.



c) Nowadays we know more about the habitat requirements of the white-backed woodpecker. It winters in Finland and then the most crucial factor in terms of survival is finding proper food. Its winter food consists of insect larvae that it finds by pecking on trees. The forestry guidelines list activities that improve the bird's living conditions in commercial forests.

## Tick the forest management practices that a forest owner can carry out in order to enhance the population growth of the white-backed woodpecker.

	Leave even economically valuable birches as retention trees	Regenerate with birch on suitable sites
	Plan future retention trees from deciduous trees	Remove aspens, willows and alders
	Leave silver birches in conifer seedling stands	Favor deciduous trees along waterways
	Increase the amount of spruce	Leave fallen decaying trees
Ī	Leave all dead deciduous trees	Remove fallen decaying trees

WOOD CONSTRUCTION IS IN AGAIN! The Old Rauma and Petäjävesi Old Church are UNESCO World Heritage sites. They represent timber construction from an era when almost everything was made of wood. Due to city fires, the construction of wooden buildings higher than two storeys was banned in the late 1800s. Outdated regulations were not withdrawn until the 1990s. The aim is to make Finnish wood construction an international brand, where high-quality architecture combines with environmental awareness. Spectacular wooden buildings can already been found around the country.

## a) Connect wooden buildings to the pictures and locations. Write the numbers (1-8) in the boxes both on the map and on the pictures.

- 1. Old Rauma (1700-1800s), the largest historical wooden house area in the Nordic countries
- 2. Petäjävesi Old Church (1764), on the west side of Jyväskylä
- 3. Sibelius Hall (2000), one of the world's best concert halls, Lahti
- 4. Joensuu Arena (2004), the largest wooden building in Finland
- 5. Pilke (2010), Science centre and office, Rovaniemi
- 6. Finnish nature centre Haltia (2013), Espoo
- 7. Puukuokka (2014), Architecture Finlandia Prize winner 2015, block of flats, Jyväskylä
- 8. Pudasjärvi school campus



b) Justify the following statements. Timber construction is...

ecologically sustainable, because

important for Finland's economy, because

- c) One cubic metre of wood stores about a tonne of carbon dioxide. Carbon remains in structures even for hundreds of years. 3 600 m<sup>3</sup> of wood is used for Pudasjärvi school. How much carbon dioxide is bound in the building?
- d) The CO<sub>2</sub> emissions of a car are about three tonnes per year. How many cars' annual emissions does the amount of carbon dioxide bound in Pudasjärvi school building correspond to?





Would you like to explore the forestry sector and work for two weeks in a forest organisation? Summer jobs all around Finland will be drawn among the school Forest Quiz winners. The workplace will be organised at your local municipality or as close as possible. Working period is from June 6 to June 17 2016. Good Finnish or Swedish language skills are required.

## Do you wish to participate in the summer job draw?

 $\_$  Yes, I'd be happy to.  $\_$  Not this time, thank you.

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