

Section L: Reading

Ontario Secondary School Literacy Test

Read the selection below and answer the questions that follow it.

# The Life of a Pothole

### HOW POTHOLES FORM

1 Here's a cross-section of a typical road. The weight of each vehicle bends the pavement slightly.

2 Cracks start to form as the asphalt gets worn.

3 When the cracks are deep enough, water gets into the sub-base.

4 The water freezes and expands, pushing up on the cracked pavement.

5 When the ice melts, it creates a void under the pavement.

6 Weight from subsequent vehicles going over the pavement breaks it up and a pothole is formed.

7 The edges of the pothole will continue to crack and crumble, making the hole larger.

### HOW THEY'RE FIXED

- The pothole is carved out with a jackhammer or masonry saw to create a neat rectangle. The excess asphalt is removed, an adhesive is applied and new asphalt is added in layers. It's then levelled and compacted with a pavement roller.
- During cold weather, temporary repairs are made with cold patch asphalt. Hot asphalt is used for permanent repairs during warmer weather.

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**Multiple-Choice** (Record the best or most correct answer on the Student Answer Sheet.)

- 1** Which combination of factors contributes most to the creation of a pothole?
- A heavy rain and loose soil
  - B freezing water and busy traffic
  - C snow tires and pavement cracks
  - D worn asphalt and temporary repairs
- 2** What does the word “void” (Stage 5) mean?
- F freezing water
  - G an empty space
  - H cracked pavement
  - J a crumbled sub-base
- 3** What remains unchanged as a pothole is formed and fixed?
- A the soil
  - B the sub-base
  - C the pavement
  - D the temperature
- 4** Which feature in this graphic text identifies the problem and its solution?
- F photos
  - G arrows
  - H subtitles
  - J numbers
- 5** How is the information in the first bullet under “How They’re Fixed” organized?
- A by cause and effect
  - B as steps in a sequence
  - C in order of importance
  - D by comparing and contrasting
- 6** What does the photograph in the middle of the page show?
- F a repaired pothole
  - G how to fix a pothole
  - H another view of Stage 7
  - J the early stages of pothole formation

End of Section L. Continue to Section M. 