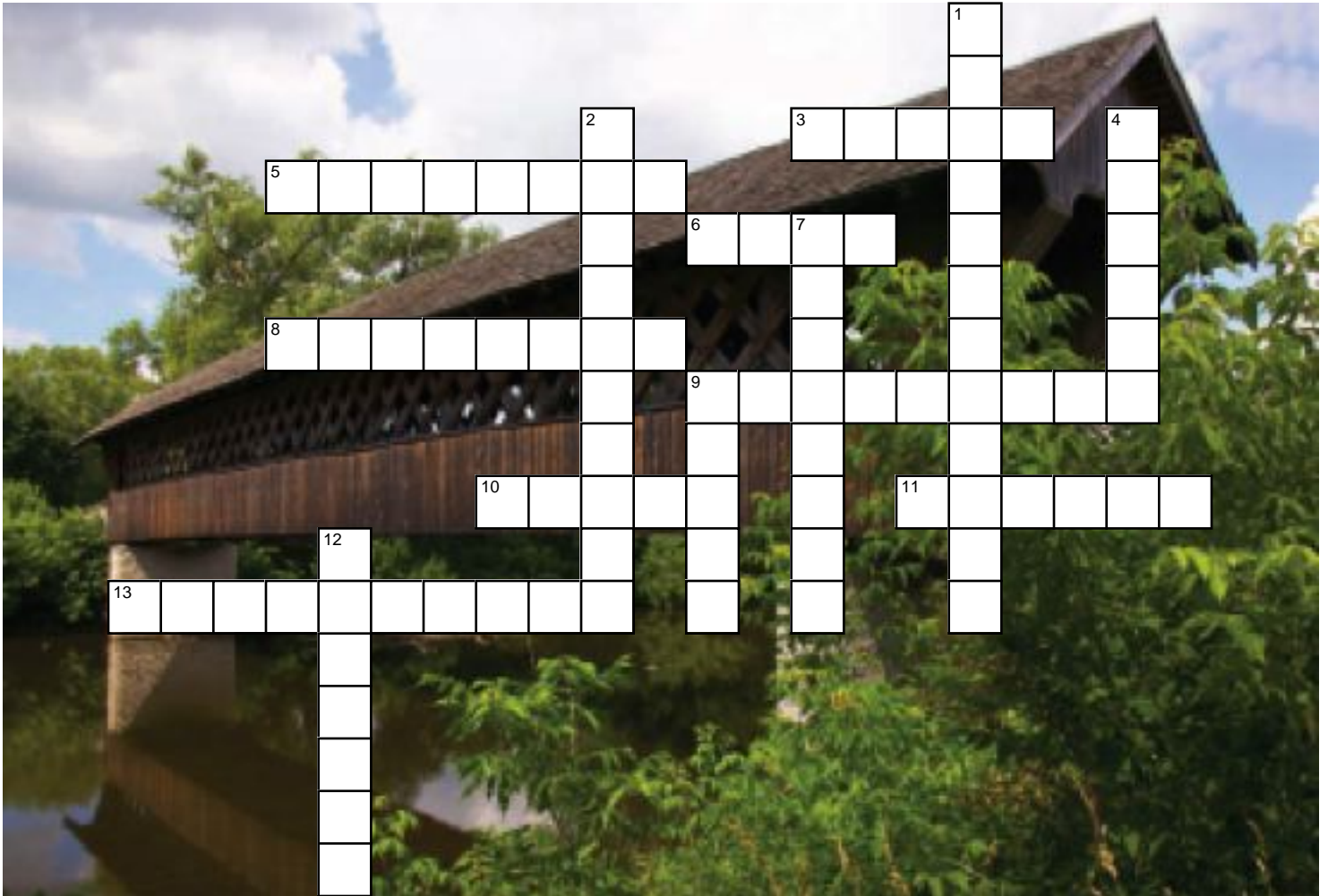


4.1 Classification of Structures



Across

- _____ structures are made of parts fastened together.
- A delicate spider's web and a sturdy car frame are both frame structures because they are built like a _____.
- Covered bridges, like the one in this background photograph, were designed and built many years ago. The roof allowed _____ to slide off so its weight did not damage the bridge.
- Shell structures use very little _____ in their construction. This means they are quite light for their size.
- A bridge is a _____ designed to span a gap.
- Most strong hollow structures are _____ structures.
- A solid structure weighs more than a _____ structure of the same size and material.
- The parts of frame structures are often called structural _____.

Down

- Many structures are _____ of shell, frame and solid structures, such as houses.
- Since shell structures have space inside them, they often make good _____.
- No matter how simple or complicated the form of each _____ is, its function is still to safely span a gap.
- When a bridge spans a roadway we call it an _____.
- Mountains, dams, sand castles, wax candles and an apple are all considered _____ structures.
- Frame structures can exist as just the frame or as a frame covered by a _____. An example is an umbrella.