

# Periscopes

9 A periscope is an optical instrument which is designed  
17 to help someone see around their surroundings above  
19 eye level.

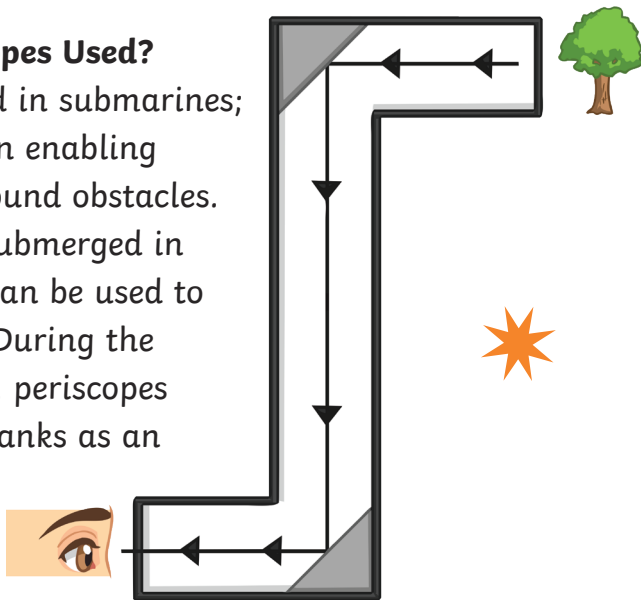


## 23 How Does It Work?

32 The simplest type of periscope contains two mirrors and  
44 a tube. The mirrors face each other, at each end of the  
56 tube, at a 45° angle. Light hits the top mirror and is  
66 then reflected down into the bottom mirror; the light is  
73 then reflected back into the viewer's eye.

## 77 Where Are Periscopes Used?

82 Periscopes are used in submarines;  
87 they are effective in enabling  
92 someone to see around obstacles.  
96 While remaining submerged in  
102 water, periscopes can be used to  
107 track other ships. During the  
111 Second World War, periscopes  
118 would be used in tanks as an  
120 observation device.



# Questions



1. Summarise why someone may want to use a periscope in 30 words or fewer.

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2. Find and copy one word which means the same as 'barriers'.

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3. How does the layout of the text help the reader?

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4. Why do you think submarines may remain submerged in water while using periscopes?

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# Periscopes

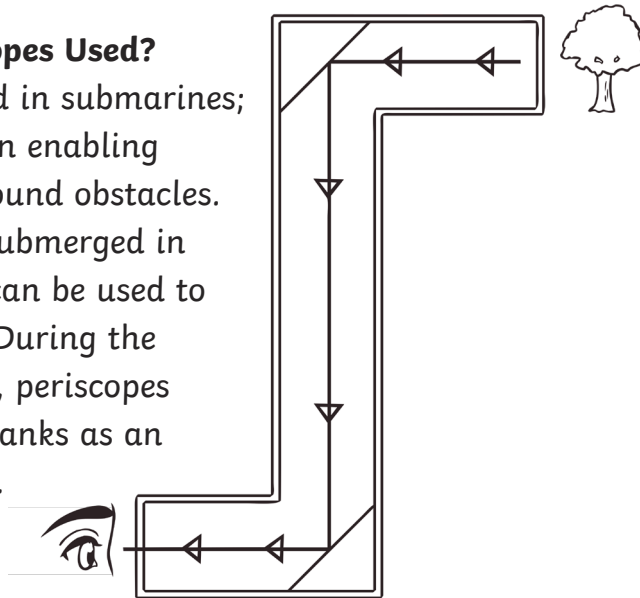
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# Answers



1. Summarise why someone may want to use a periscope in 30 words or fewer.

**Pupils' own responses, such as: Someone may want to use a periscope in order to see around corners or to see better around their surroundings.**



2. Find and copy one word which means the same as 'barriers'.  
**obstacles**



3. How does the layout of the text help the reader?  
**Pupils' own responses, such as: I think the layout of the text helps the reader because they can use the sub-headings to locate information quickly.**



4. Why do you think submarines may remain submerged in water while using periscopes?  
**Pupils' own responses, such as: I think submarines may remain submerged in water in order to try and avoid being spotted.**