

# **SECRET CODES**

Using the magic wheel, find the meaning of the following words and sentences.

# **Problem 1**

In the following coded words letter  $\triangle$  is encoded as B.

**IPVTF** 

**CPPL** 

### **Problem 2**

Encode the following words using the code where the letter A is encoded as H.

**MATH** 

LIFE

### **Problem 3**

In the following coded text letter  $\mathbf{S}$  is encoded as  $\mathsf{T}$ .

# NZ EPH JT GVOOZ

### **Problem 4**

Andrew is looking for all possible ways to code his name using the magic wheel. How many ways can he find?

#### **Problem 5**

MISTER SPY wrote a secret letter using the magic wheel.

He signed the letter LHRSDQ ROX.

Can we find out which code did he use? Decode the whole letter.

CDZQ JHCR,

XNT AQNJD LX RDBQDS BNCD!

LHRSDQ ROX

# Problem 6

Alice wants to encode a message using the code where the letter  $\underline{A}$  is encoded as  $\underline{B}$ ; but she lost the blue part of the coding wheel. Can she do it using only the red part of the coding wheel?

#### **Problem 7**

B. Tim received the coded message, but instead of decoding it he coded it again. In Tim's code letter  $\triangle$  was encoded as C. Tim gave the resulting message to Milan. It read:

FRGHV DUH IXQ

Decode it!

#### **Problem 8**

Can Milan decode the message in problem 7 in one step?

### **Problem 9**

David encodes a word and the result is the same word written backwards.

Can his word contain 5 letters? 8 letters?

# Problem 10

Milan made an error (see problem 7). First he decoded the message using Rachel's code, and then he applied Tim's code. Did he get the correct result?