

Space Marauders

ACTIVITY

Kimberley plays a computer game called Space Marauders. In this game, she has to protect her home space station from alien ships that are on attack.

She scores 10 if she hits a fighter and 100 if she hits a mother ship that carries fighters. If a fighter hits her space station, she loses 20, and if she herself is hit, the game is over.

A game is recorded using the following code:

	S	SHOOT FIGHTER	10 POINTS
	M	SHOOT MOTHER SHIP	100 POINTS
	H	SPACE STATION HIT	- 20 POINTS
	O	PLAYER HIT	GAME OVER

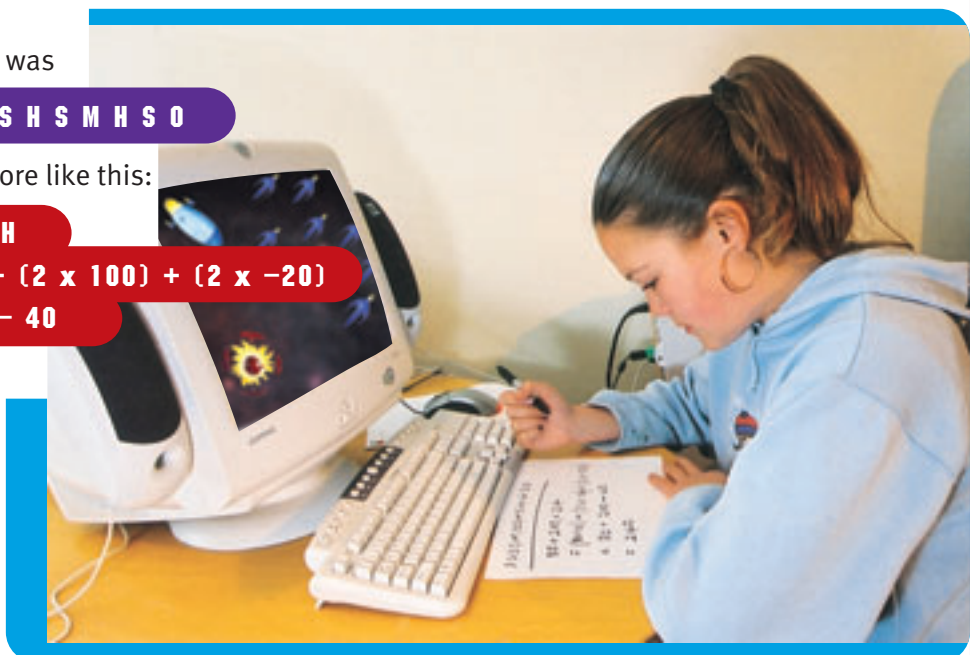
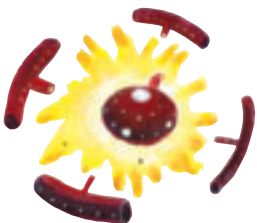


Kimberley's first game was

S S S S M S S H S M H S O

She worked out her score like this:

$$\begin{aligned}
 &8S + 2M + 2H \\
 &= (8 \times 10) + (2 \times 100) + (2 \times -20) \\
 &= 80 + 200 - 40 \\
 &= 240
 \end{aligned}$$



1. Use Kimberley's method to find the total score for each of her next three games:

a. **S S S S S M S M H H S S S H M O**

b. **S S M S H S M S S S S M S S H S M S S S O**

c. **S S S H S S M S S S M S S S S M S S S S S M S O**



2. a. Make up a record of a Space Marauders game that has a total score of between 500 and 550 points and contains all four types of scores.
 b. Write down another way to record this total score.