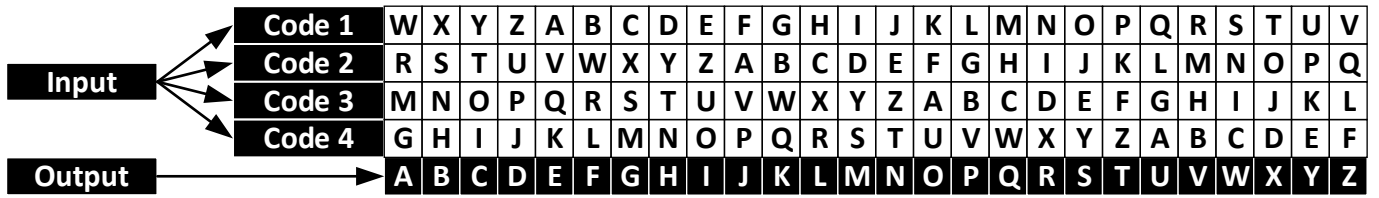


Can you work out the three puzzles to get the three numbers?

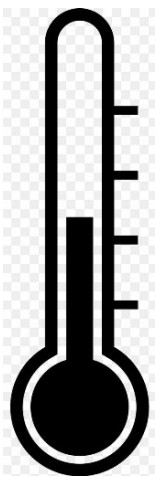
Padlock Challenge 2

1 You need to use the right code to work out the letters in the boxes to help you get your first padlock number



In	Y O D	Z O S K Y	L U A X	
Out				□
In	U Z M Z U V U	S P	V Z X Y K	
Out				○

2 Light comes to us from the sun in the form of waves but it's not the only wave that comes to us. Listed below are other waves (that form the electromagnetic spectrum) and although we can't see them all we do use them. Can you work out what we use each type for and then do the sums to get your second padlock number?



8: Heat



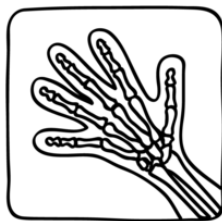
6: Communications



7: Sterilisation



9: Remote Control



10: Medical Imaging

Microwaves	1	+		=	
X Rays	2	x		=	
Radio waves	3	+		=	
Gamma rays	4	x		=	
Infra-red	5	+		=	

Add all the numbers together

□ □

Add the individual digits together

○

3 A melting point is the temperature at which a substance goes from a solid to a liquid. Can you find out the melting points of the substances below. The one with the highest melting point gives you the next padlock number

0: Water	
1: Aluminium	
2: Hydrogen	
3: Lead	
4: Tin	
5: Gold	
6: Oxygen	
7: Copper	
8: Chlorine	
9: Silver	

