



Aston Comprehensive School
Design and Technology Department

Picture Frame Mini Project

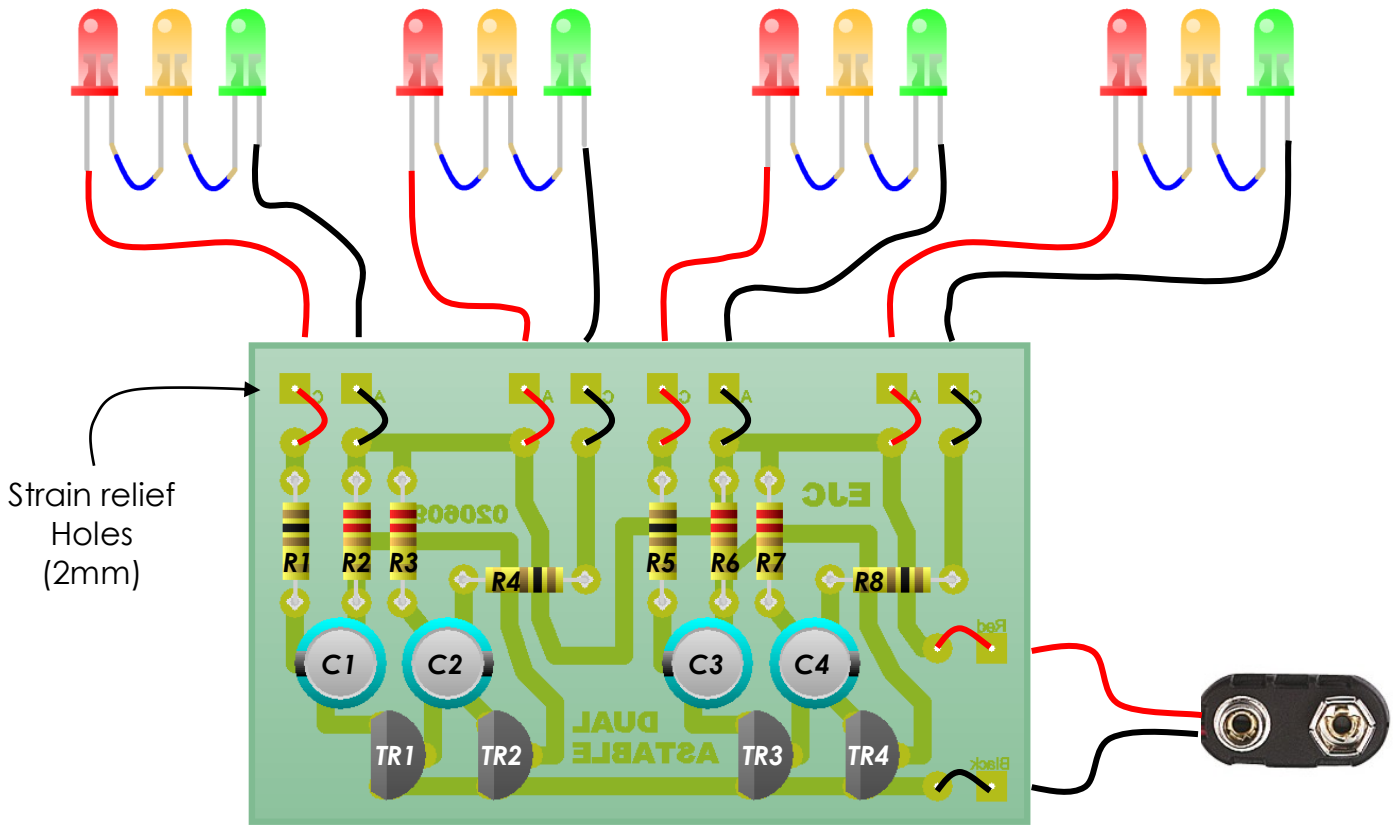
Workbook

My name is: _____

My teacher's name is: _Mr Clarvis

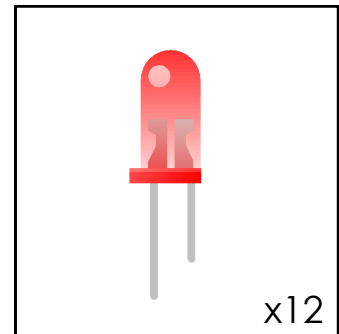
My technology group is: _____

My target level is: _____



Component List

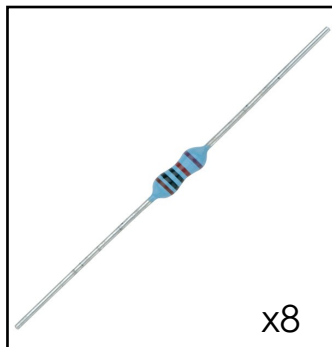
R1	100R	C1	10µF / 22µF / 100µF
R2	22K	C2	10µF / 22µF / 100µF
R3	22K	C3	10µF / 22µF / 100µF
R4	100R	C4	10µF / 22µF / 100µF
R5	100R		
R6	22K	12x	LEDs
R7	22K	1x	PP3 Battery Clip
R8	100R	4x	BC337 NPN Transistors (TR1-TR4)



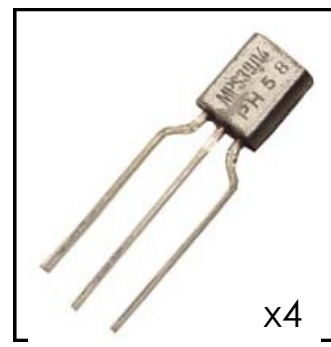
Name: _____



Name: _____

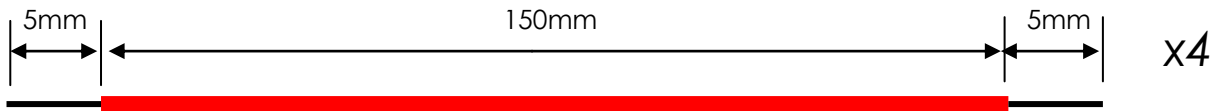


Name: _____



Name: _____

Cut eight pieces of wire as shown below.



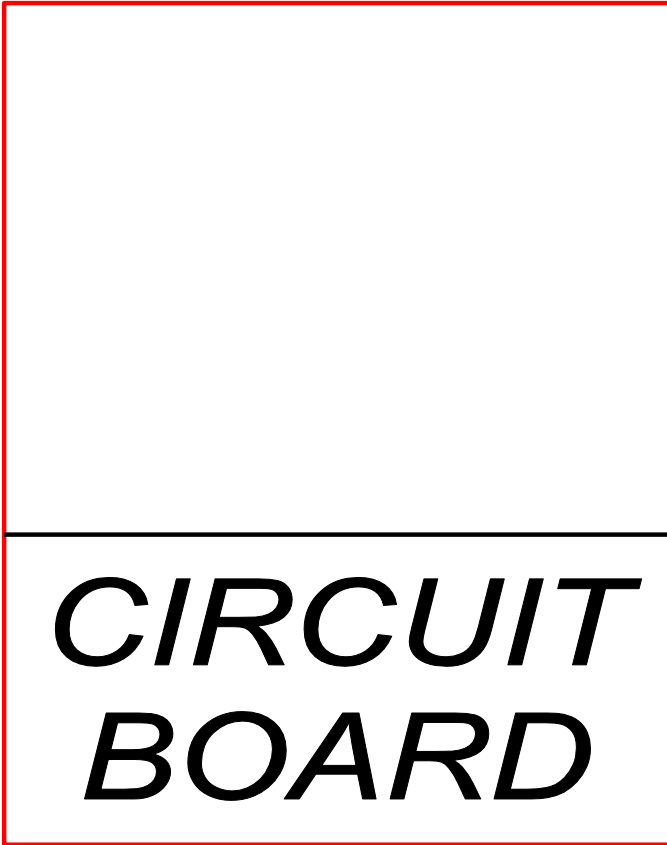
Use the colour code to work out what coloured bands your resistors have.

Colour	BAND 1	BAND 2	BAND 3 Multiplier	BAND 4 Tolerance
BLACK	0	0	-	
BROWN	1	1	0	
RED	2	2	00	
ORANGE	3	3	000	
YELLOW	4	4	000,0	
GREEN	5	5	000,00	
BLUE	6	6	000,000	
VIOLET	7	7	-	
GREY	8	8	-	
WHITE	9	9	-	GOLD

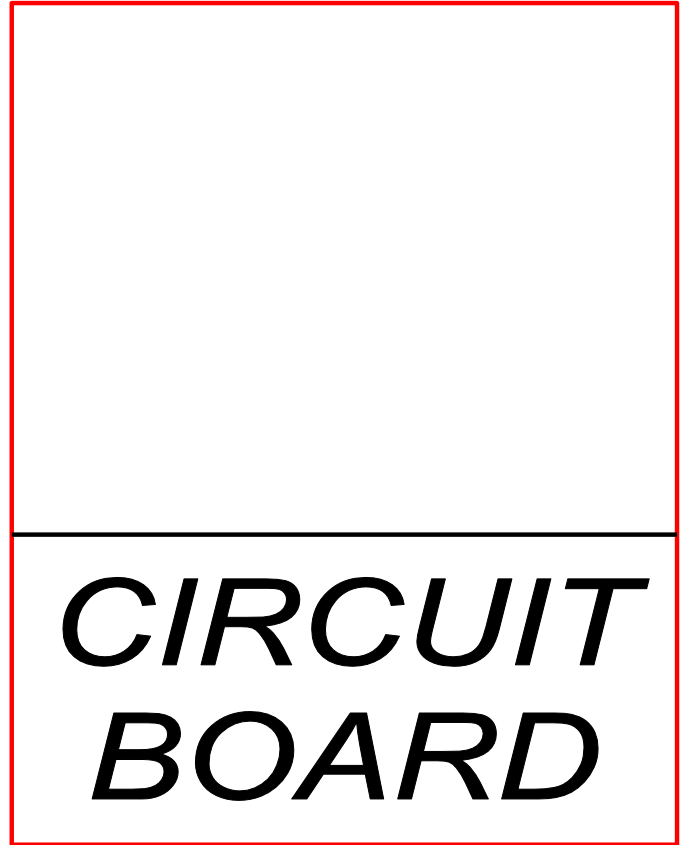
Resistor	Band 1	Band 2	Band 3	Band 4
100R				Gold
22K (22000)				Gold



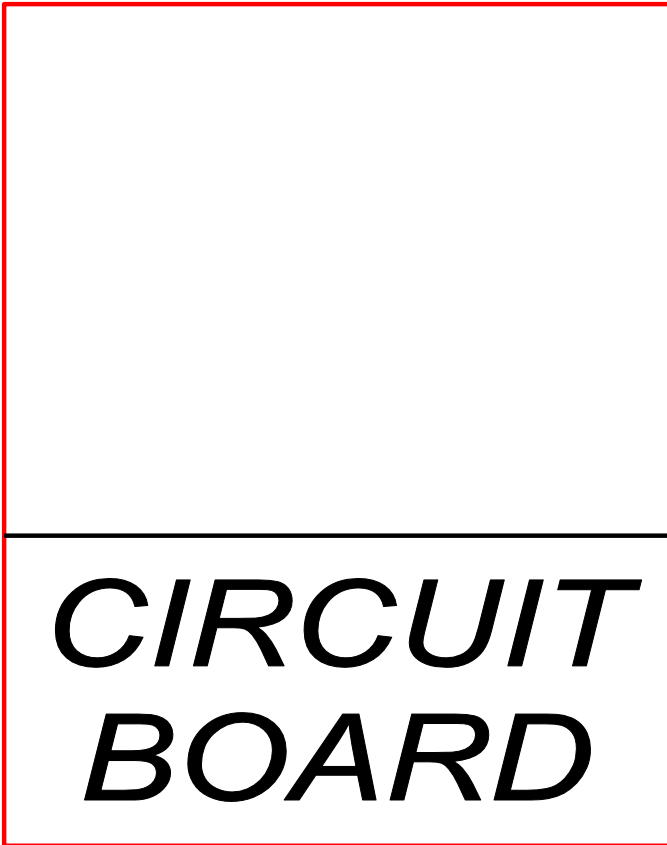
Idea 1



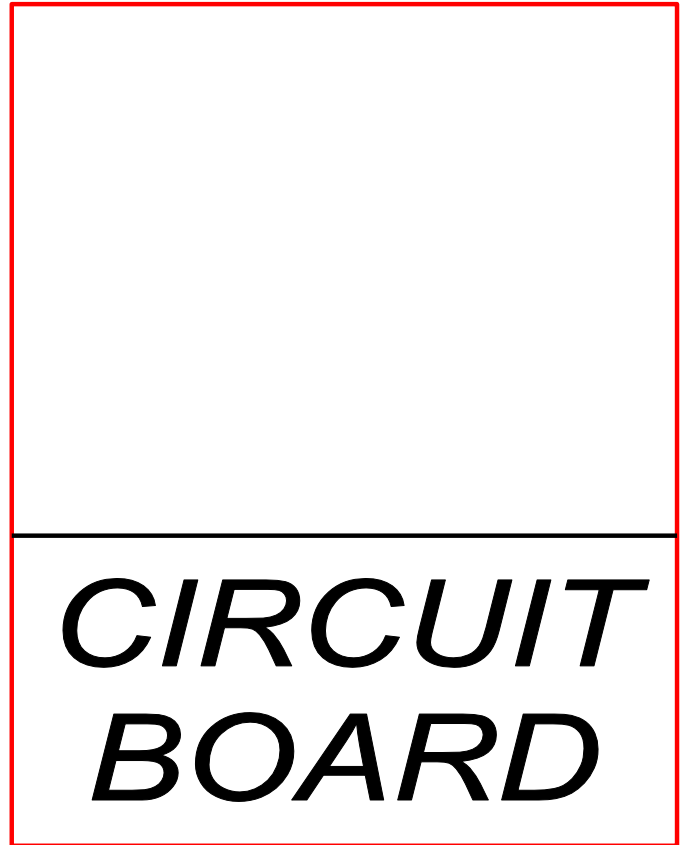
Idea 2



Idea 3



Idea 4



CIRCUIT BOARD