

2023-2024 Quality Education Fund Thematic Network - Tertiary Institutes

STEAM Education with Self-directed and Progressive Learning of Engineering Design Process for Problem-solving

透過STEAM教育自主及循序漸進學習以工程設計流程解難

風帆車 windsurfing car

保良局莊啓程第二小學

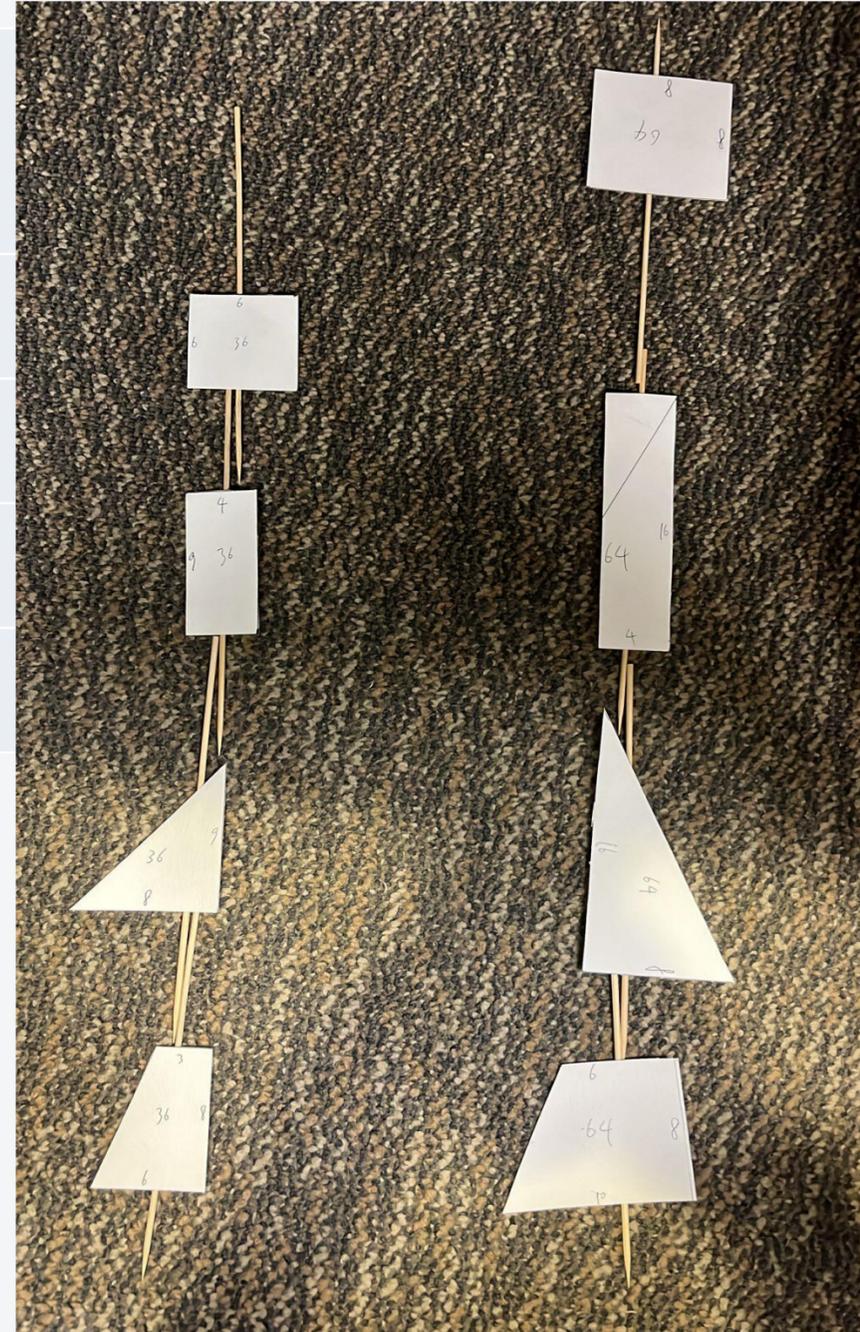
PLK Vicwood K T Chong No.2 Primary School

OBJECTIVES OF EXPERIMENT

- To compare the velocity of the windsurfing car, by changing sail in different shape but under same area

EXPERIMENT MATERIAL

shape/area	36cm^2
square	$6*6$
rectangle	$9*4$
triangle	$9*8/2$
trapezoid	$8(6+3)/2$



	64cm^2
	$8*8$
	$4*16$
	$8*16/2$
	$8(10+6)/2$



RESULT

shape/area 36cm²

square 4.765/7=0.68ms⁻¹

rectangle 5.095/11=0.46ms⁻¹

triangle 4.66/9.17=0.50ms⁻¹

trapezoid 5.085/14.9=0.34ms⁻¹



64cm²

6.345/18.35=0.34ms⁻¹

6.665/18.69=0.36ms⁻¹

6.685/9.63=0.69ms⁻¹

5.355/21.39=0.25ms⁻¹