

# The Education University of Hong Kong

## 2022-2023 Quality Education Fund Thematic Network - Tertiary Institutes

### STEM Project Team

SCHOOL: SF 嘉諾撒聖方濟各學校 St. Francis' Canossian School

TOPIC: p.3 parachute

# Topic

- Using parachute to transport supplies

# Experiment 1 material

- Plastic sheeting (20 cm \* 2, 25cm \* 2)
- Cotton rope (30cm \* 24)
- Biscuit \* 4

# Objectives of Experiment 1

To compare the following prototypes:

1. 20\*20 cm Plastic sheeting with 4 ropes
2. 20\*20 cm Plastic sheeting with 8 ropes
3. 25\*25 cm Plastic sheeting with 4 ropes
4. 25\*25 cm Plastic sheeting with 8 ropes

# Photo



# Result

Type	Time (s)	Biscuit broken?
20*20 cm Plastic sheeting with 4 ropes	1.86	yes
20*20 cm Plastic sheeting with 8 ropes	2.66	no
25*25 cm Plastic sheeting with 4 ropes	2.28	no
25*25 cm Plastic sheeting with 8 ropes	2.53	no

# Objectives of Experiment 2

To compare the following prototypes:

1. 20\*20 cm Plastic sheeting, plastic film, pop paper
2. 30\*30 cm Plastic sheeting, plastic film, pop paper

# Photo



# Result 2

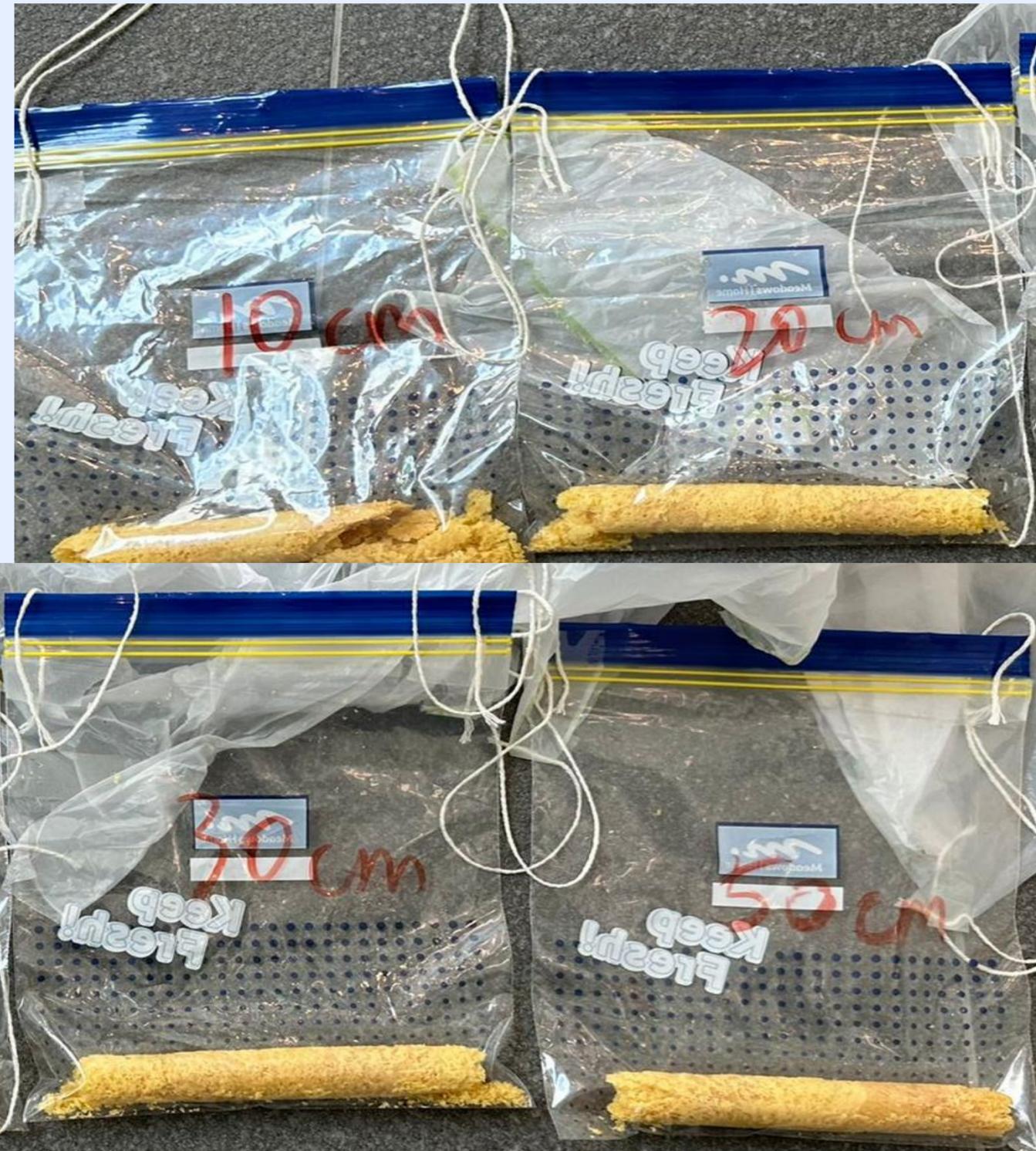
length	pop paper	plastic sheet	plastic film
20cm	1.98	1.72	1.72
	1.53	1.53	1.63
	1.64	1.52	1.91
	1.66	1.53	1.92
average of 20cm	1.7	1.575	1.795
30cm	1.99	2.07	2.35
	2.38	2.29	2.64
	2.55	2.89	2.47
average of 30cm	2.3067	2.4167	2.4867

# Objectives of Experiment 3

To compare the following prototypes:

1. 10\*10 cm Plastic sheeting
2. 20\*20 cm Plastic sheeting
3. 30\*30 cm Plastic sheeting
4. 50\*50 cm Plastic sheeting

# Before VS After



# Result

Type	Time (s)	eggroll broken lv.
10*10 cm Plastic sheeting	0.824	
20*20 cm Plastic sheeting	1.463	
30*30 cm Plastic sheeting	1.802	
50*50 cm Plastic sheeting	2.911	