

Saltmarsh Investigation

Aim: To investigate changes in vegetation with increasing height up a saltmarsh

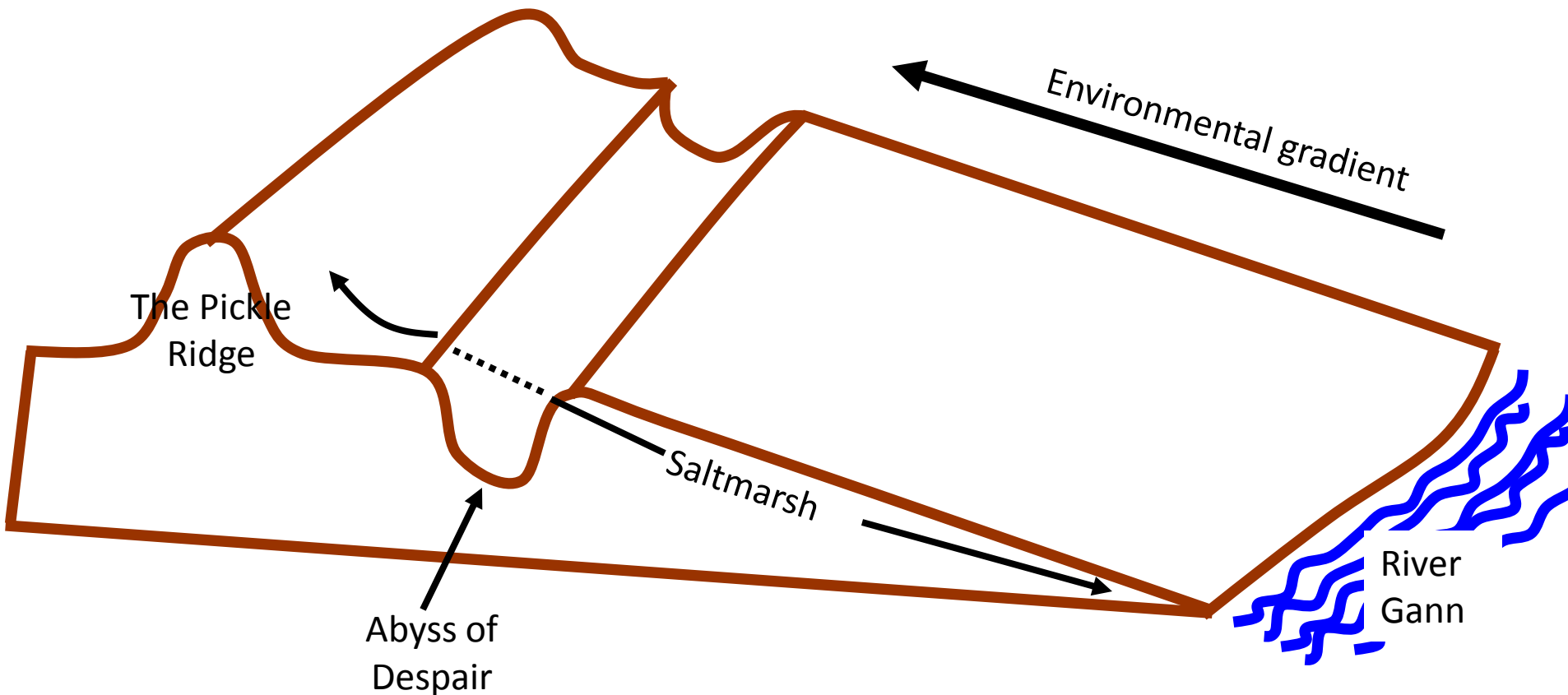
Site: The Gann Saltmarsh

Grid reference: SM 815 074

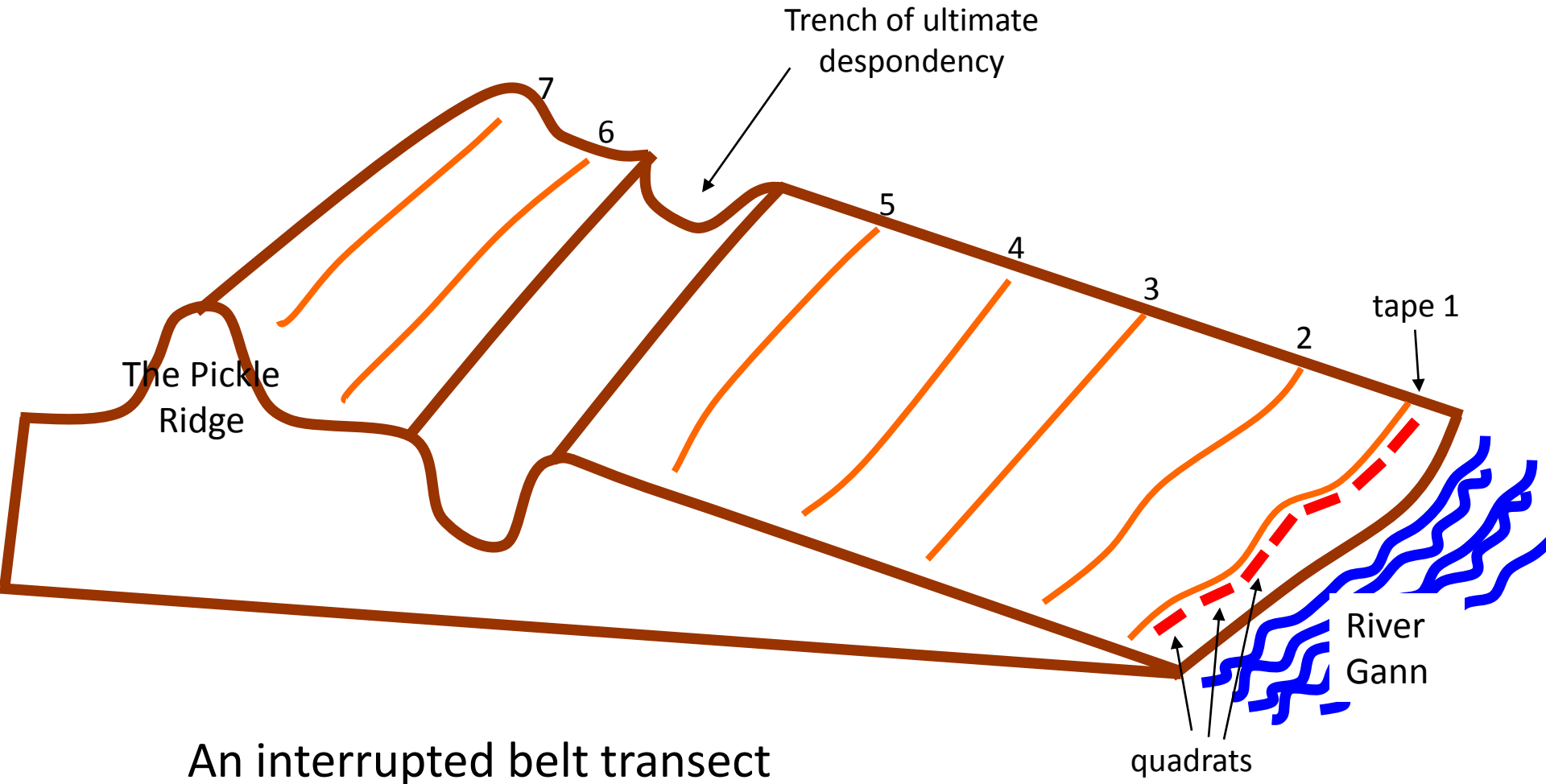
Aspect: South-East

Low tide: 1.85m at 09.00 (BST)

Date: 22.06.14



Sample Layout



Identifying plants

Look at the plant you are trying to identify. You can't see small plants if you are standing up

Use dichotomous keys, or if this fails ask

Please do not rip plants up from the marsh and bring them to your tutor; he/she is happy to walk to where you are and advise you

Treat the saltmarsh and its inhabitants with care

Identifying plants

Write down **3 top tips** for identifying plants

Look at the plant you are trying to identify. You can't see small plants if you are standing up

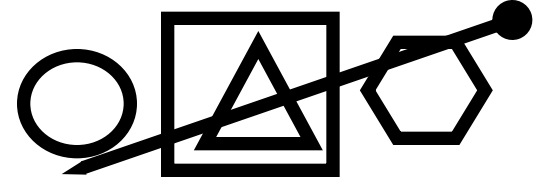
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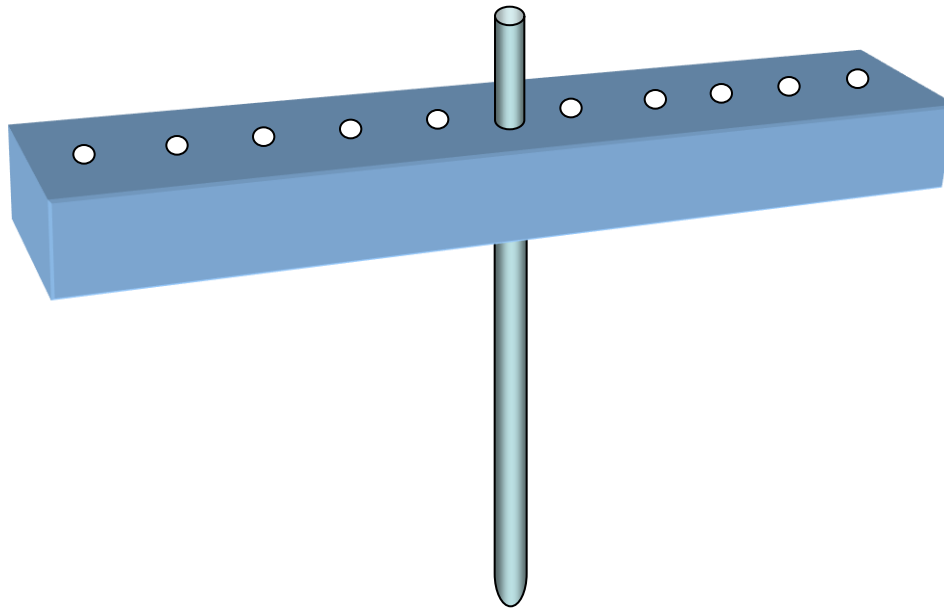
Treat the saltmarsh and its inhabitants with care

Measuring abundance of vegetation

A quadrat is a sample area of any size or shape:

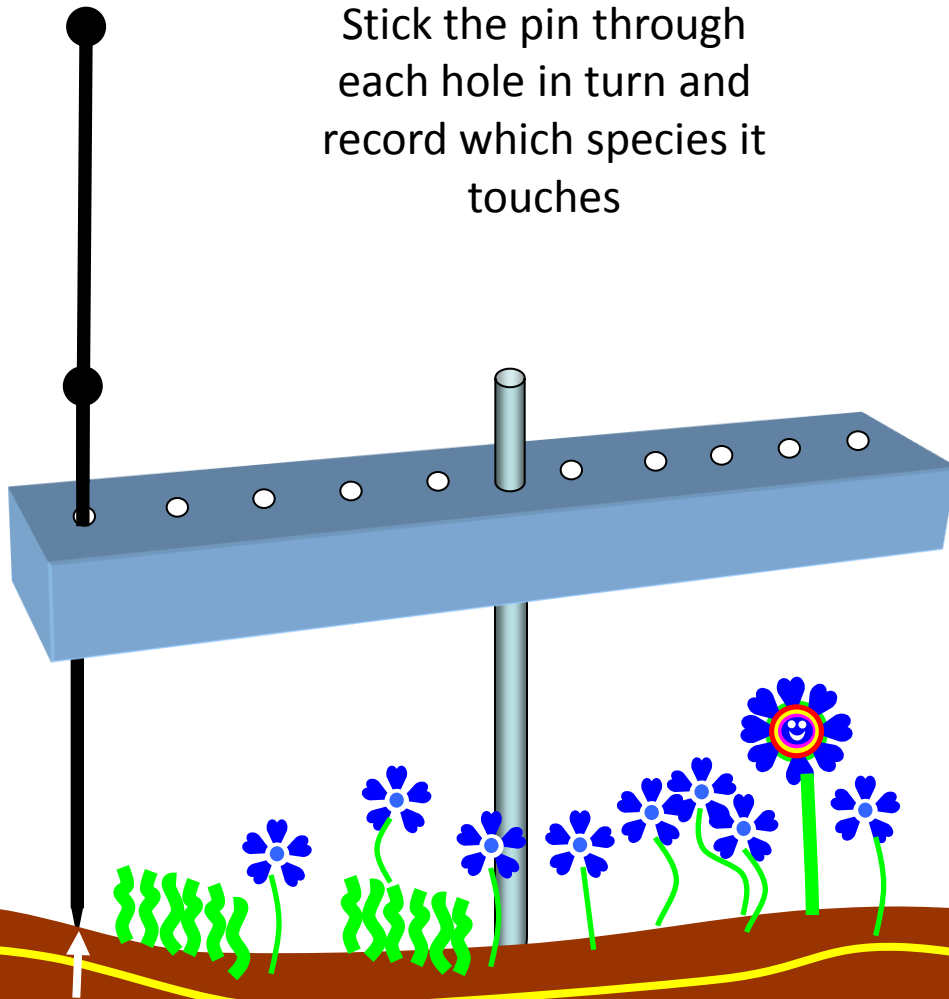


A pin



A point quadrat

Stick the pin through
each hole in turn and
record which species it
touches






This pin has
hit nothing
but bare
ground




Site 1

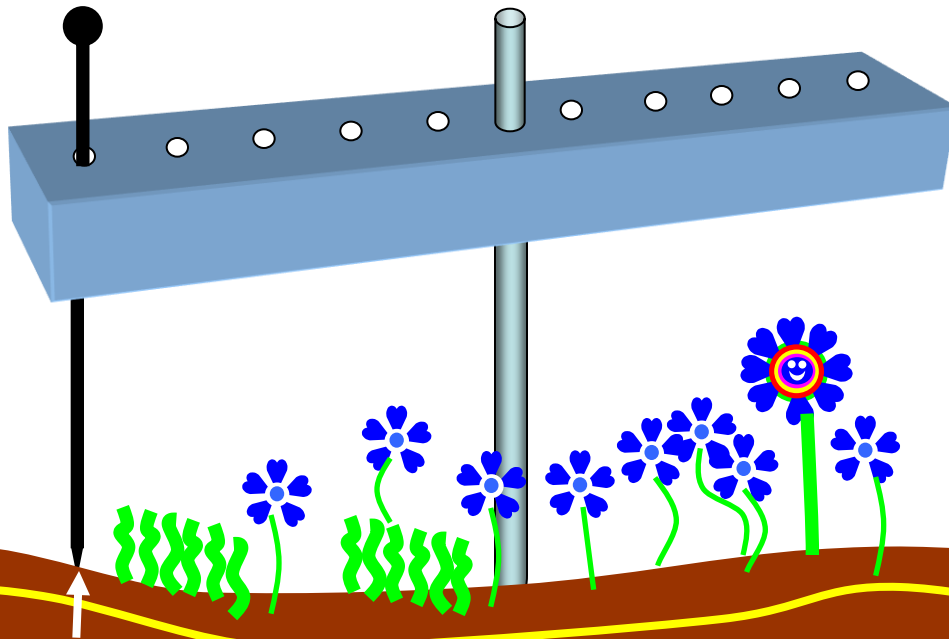
tape

Saltmarsh recording sheet

Quadrat number	1	2	3	etc
Height				
Species				
Bare ground				
				
				
				

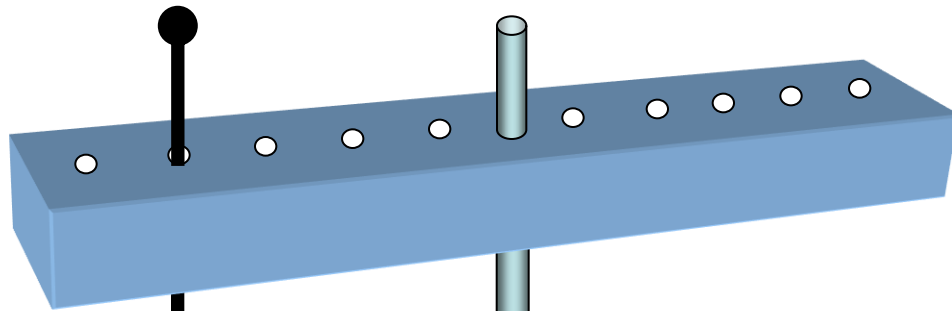
Record a tally-
mark in the
column for
quadrat 1 and row
for bare ground

Saltmarsh recording sheet				
Quadrat number	1	2	3	etc
Height				
Species				
Bare ground	I			
				
				
				



This pin has
hit nothing
but bare
ground




Record a tally-
mark in the
column for
quadrat 1 and row
for



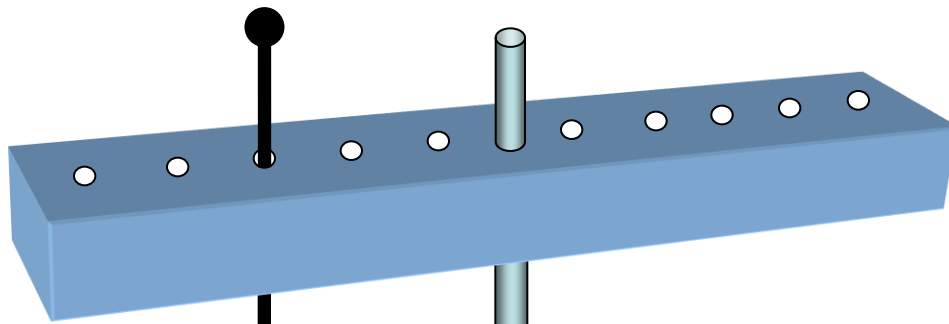
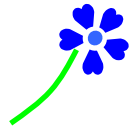
This pin has
hit



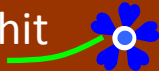
Saltmarsh recording sheet

Quadrat number	1	2	3	etc
Height				
Species				
Bare ground				
				
				
				

Record a tally-
mark in the
column for
quadrat 1 and row
for



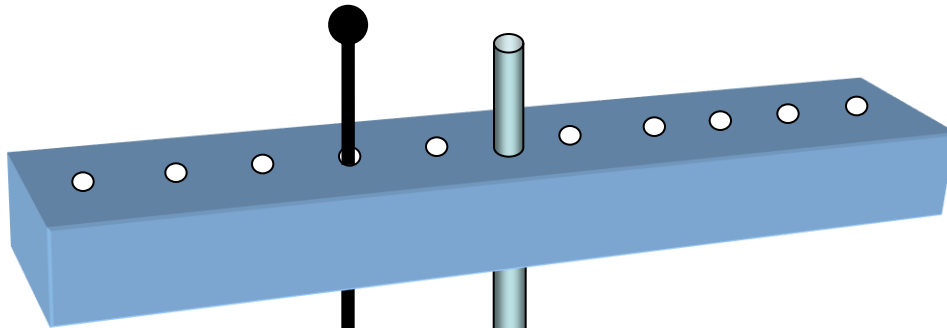
This pin has
hit



Saltmarsh recording sheet

Quadrat number	1	2	3	etc
Height				
Species				
Bare ground				

Record a tally-
mark in the
column for
quadrat 1 and row
for



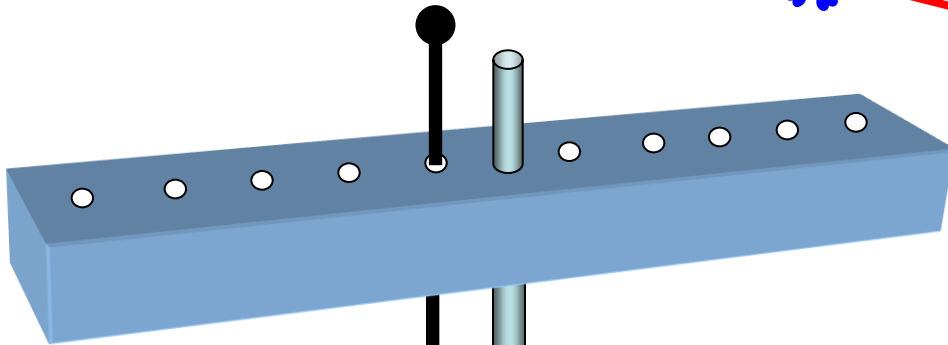
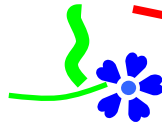
This pin has
hit



Saltmarsh recording sheet

Quadrat number	1	2	3	etc
Height				
Species				
Bare ground				

Record a tally-
mark in the
column for
quadrat 1 and row
for
and

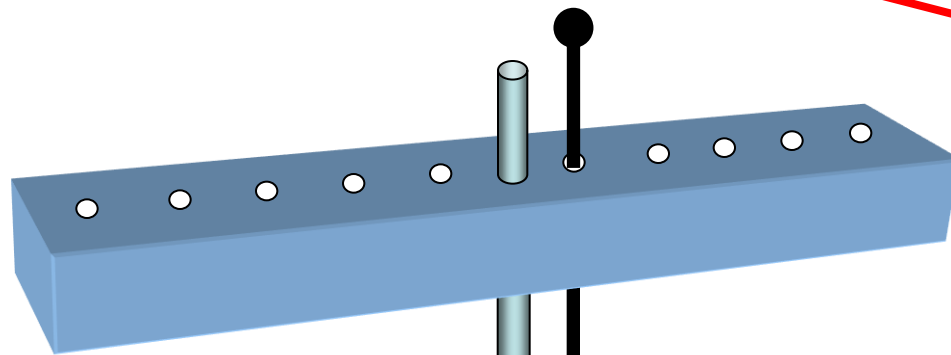


This pin has
hit and



Saltmarsh recording sheet				
Quadrat number	1	2	3	etc
Height				
Species				
Bare ground	I			
	III			
	II			

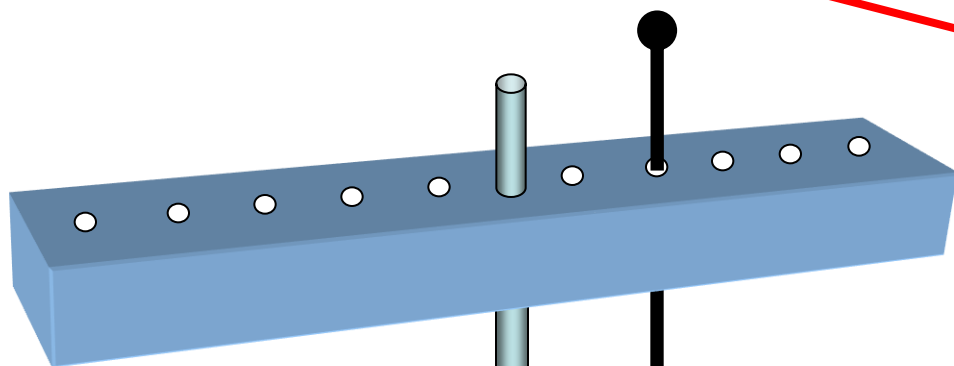
Record a tally-
mark in the
column for
quadrat 1 and row
for



This pin has
hit

Saltmarsh recording sheet				
Quadrat number	1	2	3	etc
Height				
Species				
Bare ground				

Record a tally-
mark in the
column for
quadrat 1 and row
for



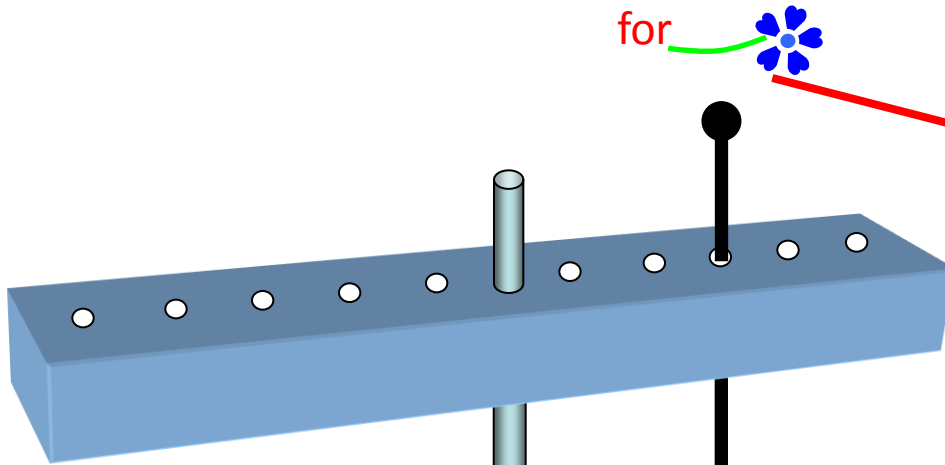
This pin has
hit



Saltmarsh recording sheet

Quadrat number	1	2	3	etc
Height				
Species				
Bare ground	I			

Record a tally-
mark in the
column for
quadrat 1 and row
for



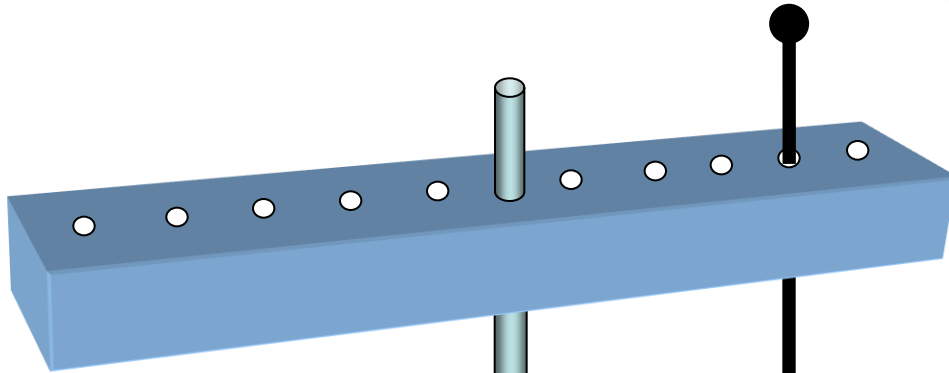
This pin has
hit






Saltmarsh recording sheet

Quadrat number	1	2	3	etc
Height				
Species				
Bare ground	I			
	III			
	LI			

Record a tally-
mark in the
column for
quadrat 1 and row
for

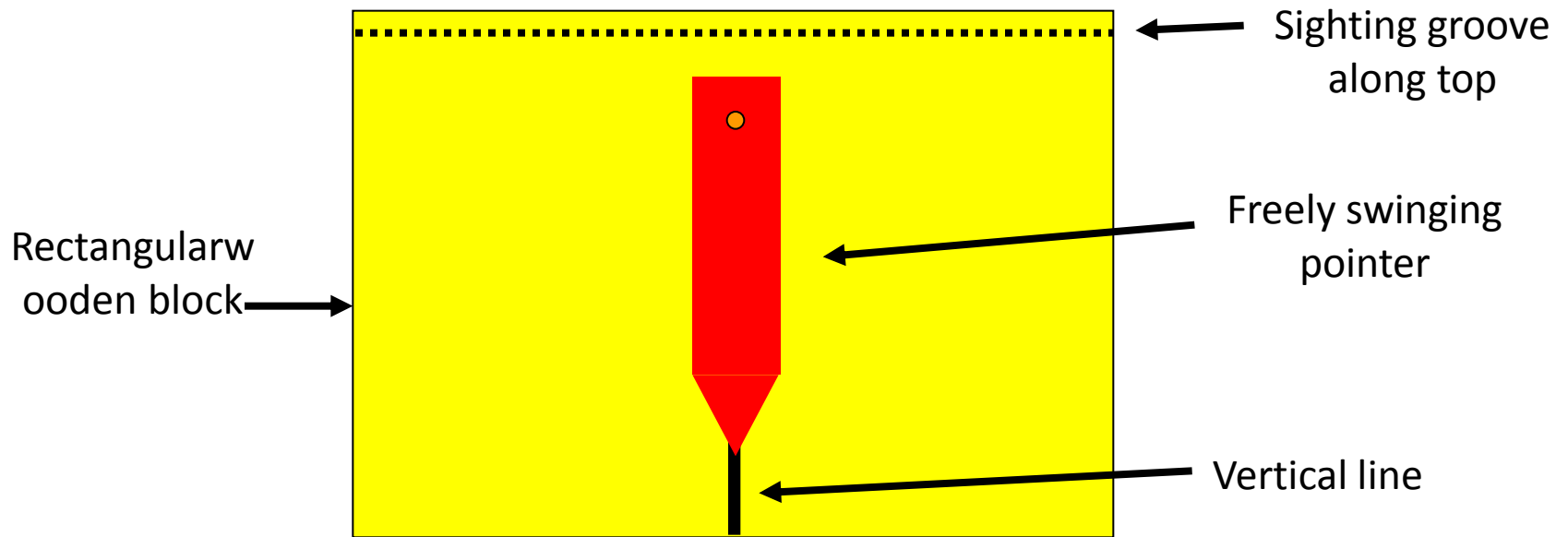


Saltmarsh recording sheet				
Quadrat number	1	2	3	etc
Height				
Species				
Bare ground	I			
	III			
	LI			
	I			

This pin has
hit

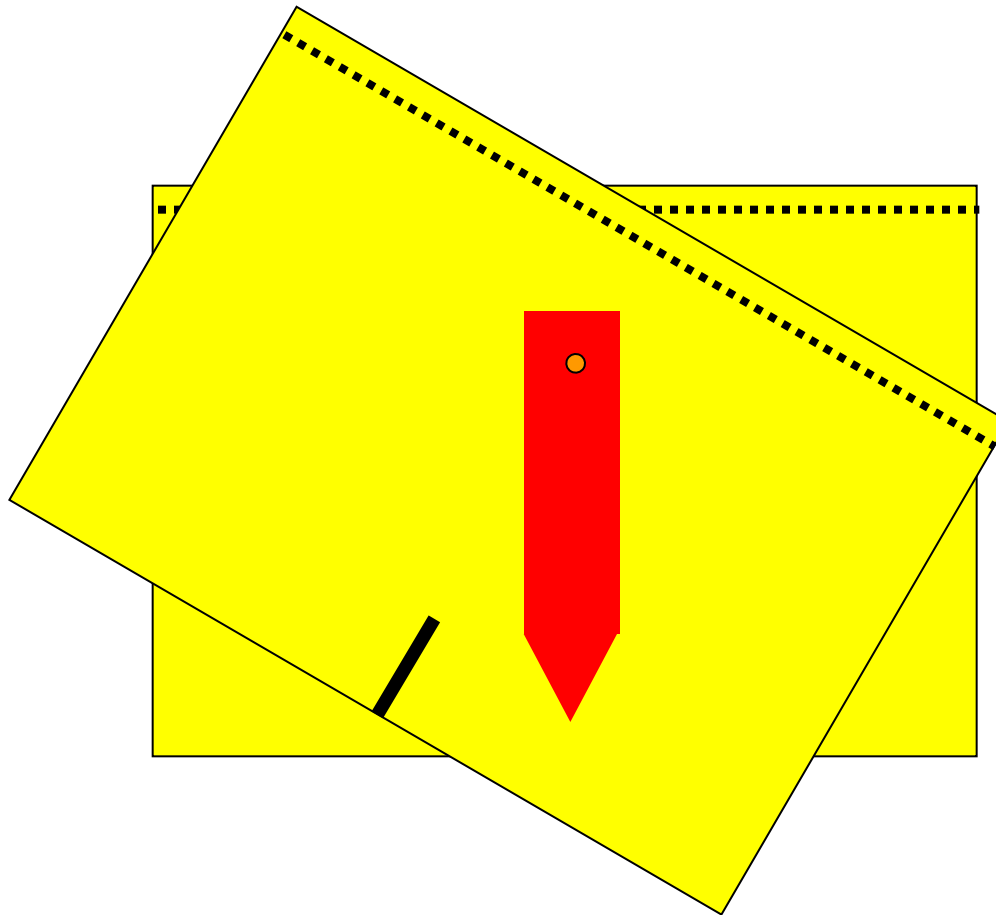


Height Measuring

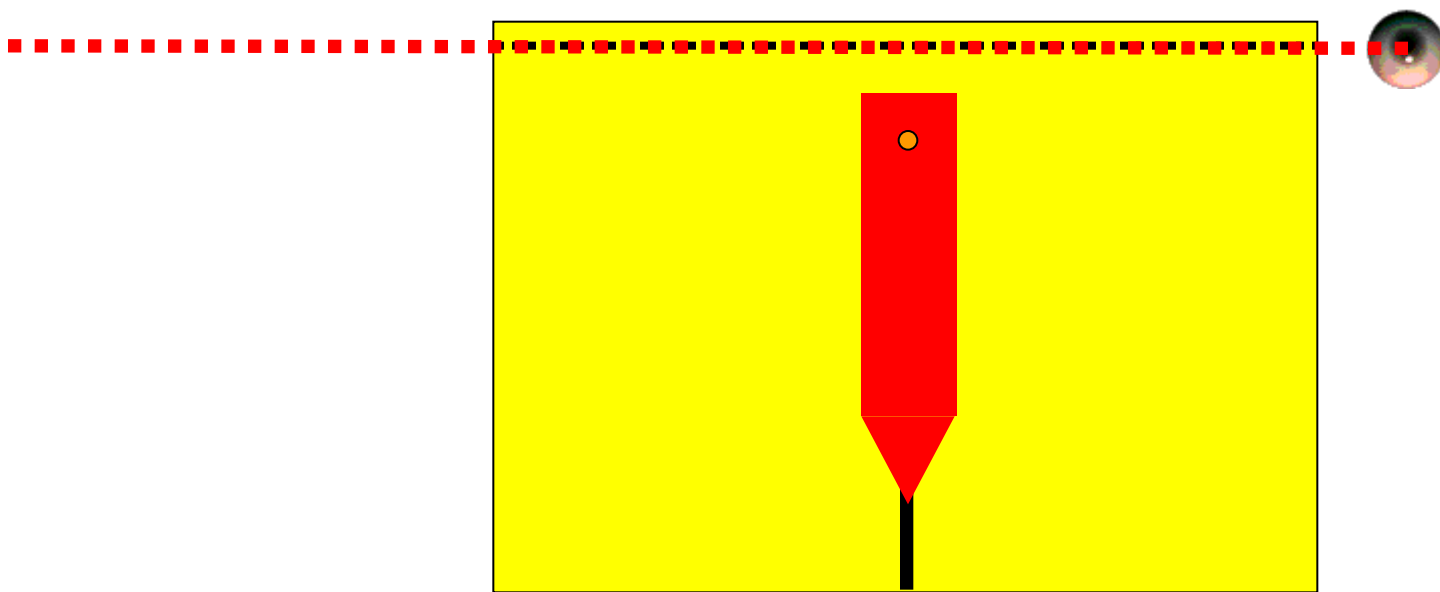


A simple level/clinometer

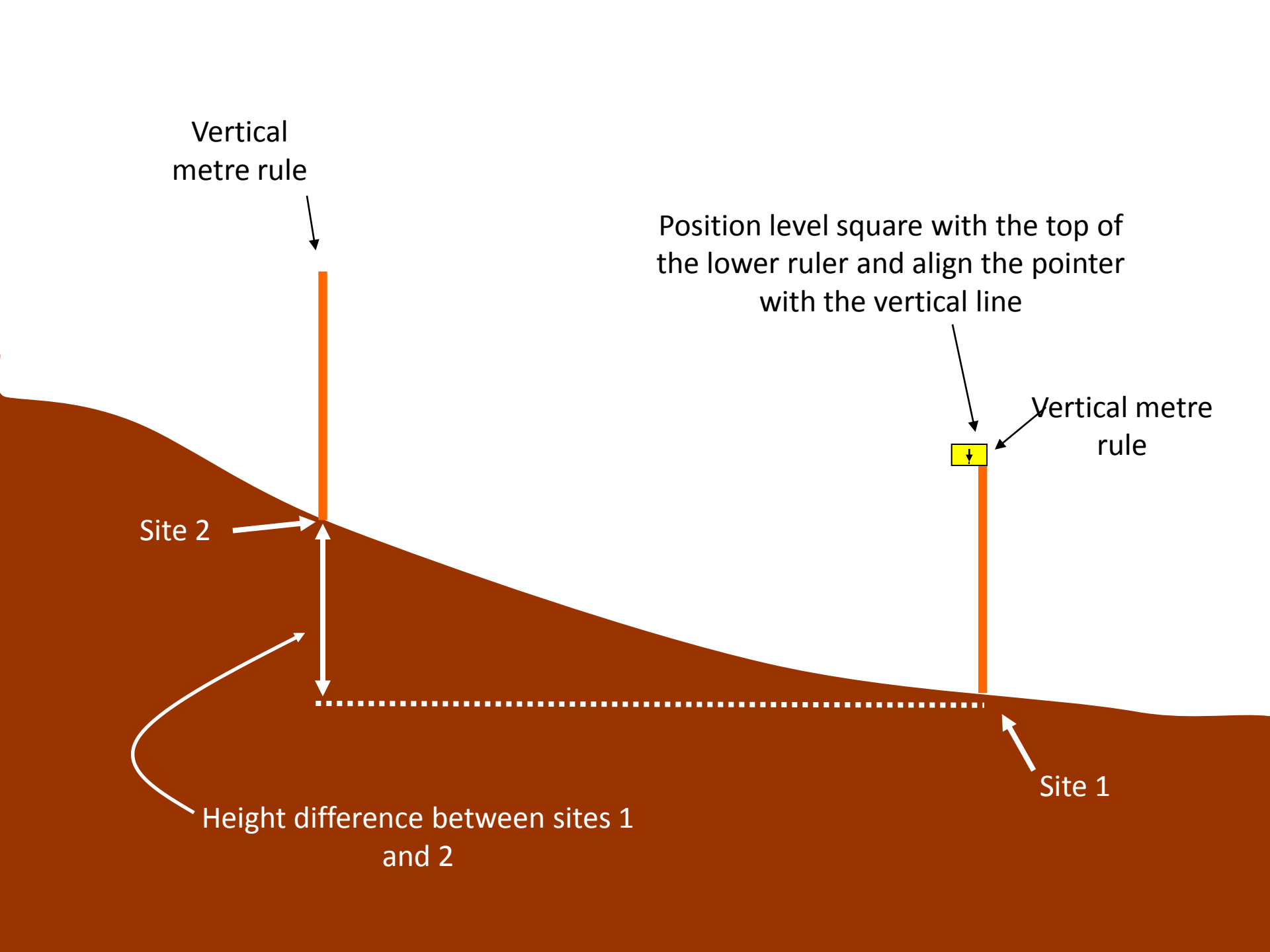
(Photon activated uniangular clinometrical device)



Tilt the level and the pointer swings out of alignment with the vertical line



When the pointer is aligned with the vertical line the level
can be used to sight horizontally



Vertical
metre rule

Position level square with the top of
the lower ruler and align the pointer
with the vertical line

Vertical metre
rule

Site 2

Site 1

Height difference between sites 1
and 2

Find a friend with a finger

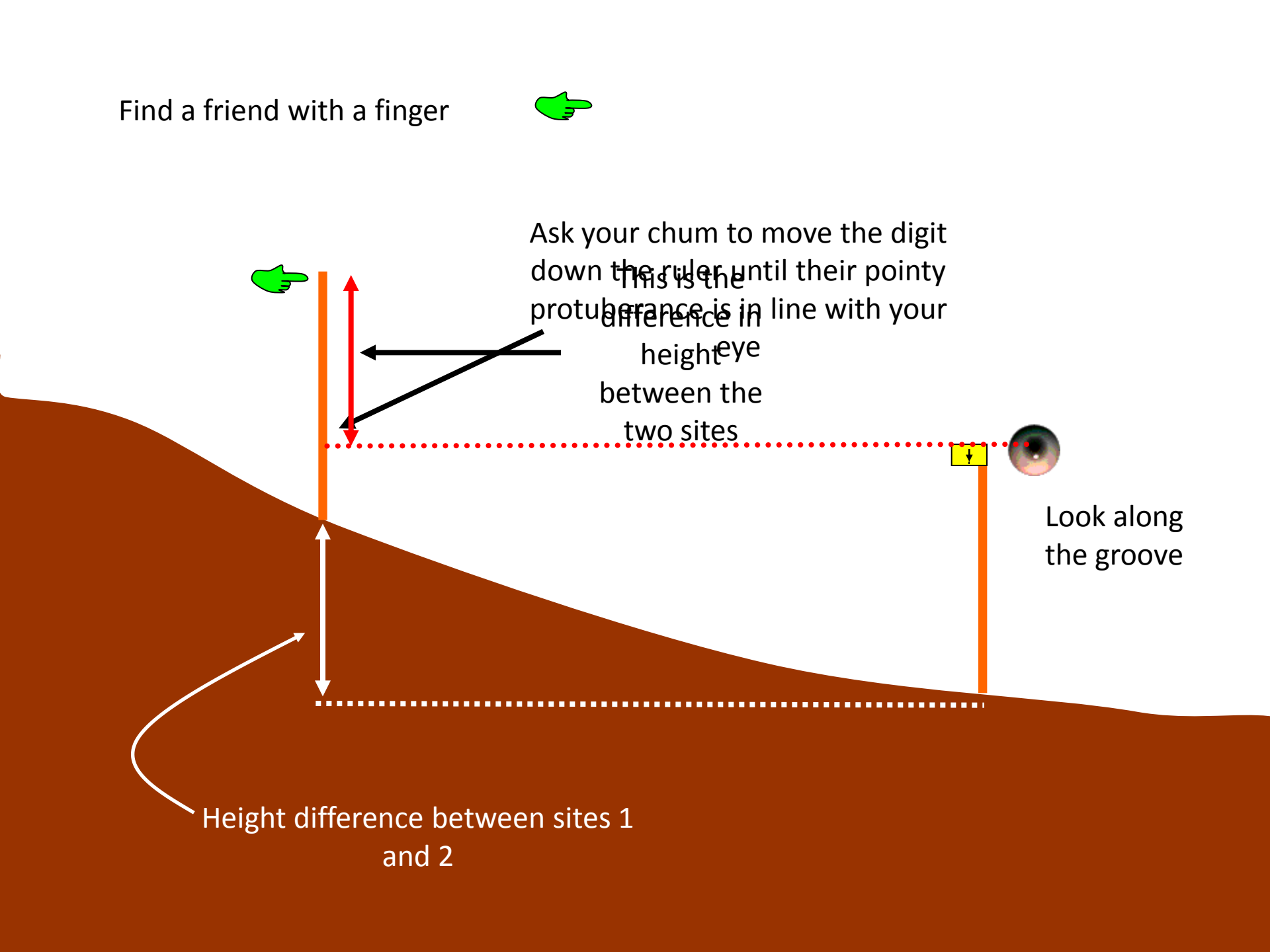


Ask your chum to move the digit
down the ruler until their pointy
protuberance is in line with your
eye
This is the
difference in
height
between the
two sites



Look along
the groove

Height difference between sites 1
and 2

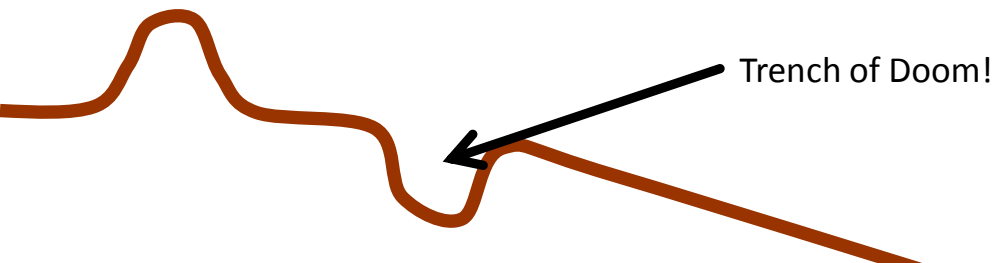
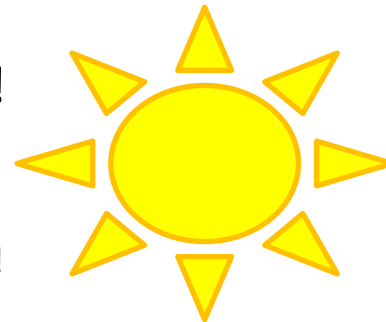


Risks

- Tides
 - Check tide times
 - Keep an eye on the water
- Roads
 - Be careful on the road, listen to instructions
- Equipment
 - Only use equipment for it's intended purpose
- Weather
 - Waterproofs/suncream
- Mud
 - keep moving to avoid getting stuck!
 - Wear wellies!

Low tide:m at 1.33

Hide tide: ...m at 7.33



Each group needs the following equipment:

One point quadrat with leg and pin

One key to saltmarsh plants

One saltmarsh recording sheet

One simple level

Two metre rules

Wellies (or get very muddy feet)

A positive attitude towards mud, lunch(?), a pencil, a clipboard, maybe a plastic bag

