

Navigate to the website:

<https://ees.as.uky.edu/sites/default/files/elearning/module11swf.swf>

or Google: **ees uk mass movement**

HOME

1) Read and scroll the text to **define mass movement:**

2) **Three (3) Examples:**

OVERVIEW

3) **FORCES:** driving force for mass movement is....

4) **FACTORS** include: _____, _____,
 _____ and _____



5) **DRIVING AND REISITING FORCES:** check each circle and place it in the correct side

Increases driving force or decreases (lowers) resistance force CAUSES mass movement	Decreases driving force or increases resistance force: PREVENTS mass movements



CONTROLS- SLOPE

- 6) G_p represents: _____
- 7) G_d represents: _____
- 8) The boulder will roll downhill when the G_p has _____
and the G_d has _____



CONTROLS- SLOPE MATERIALS

- 9) Unconsolidated materials such as _____ are particularly prone to mass movement because they....._____
- 10) Strong crystalline rocks such as granite, gneiss, and limestone are very strong and _____ to mass movement
- 11) Sketch a diagram of a **tilted 'dip slope'**
- 12) **Fractures** due to _____ create zones of weakness.
- 13) What is the benefit of **plant roots** and **vegetation** to mass movement?



14) CONTROLS – WATER

Water amount	Results
Dry Sand	
Damp Sand	
Saturated Sand	
Rainstorm	

CONTROLS – VEGATATION

15) Vegetation and roots do 2 things: _____ and _____

16) What are **3 ways** that vegetation is removed that causes slope stability problems:

A. _____ B. _____ C. _____

17) CONTROLS- TRIGGERS such as _____ and _____

FALLS:

18) What are **talus** slopes?

19) How do they form?

20) How steep are they?

SLIDES

21) “S” Slides occur in s _____. A s _____ is type of slide commonly found in roadside s _____ at a site of s _____, poorly vegetated soil slopes.

22) **FLOWS** behave as a _____.

23) Examples are:

24) CREEP: moves at **(fastest or slowest)** speeds

25) Label each type of mass movement below as either **FALL, SLIDE, CREEP** or **FLOW**



MODEL

26) Select one factor from each location to model best and worst situation

BEST / WORST SCENARIO	3 IMPROVEMENTS	RESULTS
BEST combination of factors	- - -	Mass movement Stable
	- - -	Mass movement stable
WORST combination of factors	- - -	Mass movement stable