

Grading Checklist

Learning Assessment #7 – Maps & Structures

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Learning assessments are graded using a checklist-style rubric. The purpose of the checklist is to clearly and concisely show students where they lost marks on the assignment and why. When students are reviewing their work they initially focus on the areas they got incorrect as identified on the checklist.

The checklists also help to ensure that grading is transparent to the students. They help maintain consistency amongst graders, which may be a challenge in large courses with multiple instructors/teaching assistants marking the same assignment.

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LEARNING ASSESSMENT #7 (MAPS & STRUCTURES) GRADING CHECKLIST

Part 1: Cross-section – Fault Solution (9 pts)

- ___ units are extended ABOVE & BELOW ground to the fault plane drawn (note: units should not extend past the fault plane)
- ___ steep dipping fault ($\sim 70^\circ$) is drawn between outcrops
- ___ hangingwall is labelled
- ___ footwall is labelled
- ___ arrows show movement of both hangingwall and footwall
- ___ fault is correctly named
- ___ layers Lm, Ss and Sh are correctly drawn on hangingwall side
- ___ layers Lm, Ss and Sh are correctly drawn on footwall side
- ___ principle (or maximum) stress directions drawn consistent with type of fault
 - Normal fault should have principle stress arrow pointing downward from the air towards the centre of the Earth
 - Reverse fault should have horizontal arrows pointing towards the fault plane

Part 2: Map and Legend (11 pts)

- ___ at least one strike and dip symbol is drawn for units on footwall side
- ___ at least one strike and dip symbol for units on hangingwall side
- ___ contacts are fully extended across the entire map area to the edge of the map boundaries
- ___ correct orientations of geologic contacts between units are drawn (with correct strike direction)
 - contacts should be drawn in a north-south orientation
- ___ v-pattern drawn on outcrops
 - v should bend towards the west side of the map
- ___ layers Lm, Ss and Sh are correctly labelled on the map
- ___ fault trace is drawn on map
- ___ fault trace is given proper map symbol
- ___ rock units on legend is correctly labelled in order
- ___ geologic symbols are indicated in legend (strike and dip, geologic contact, fault trace)
- ___ cross-section and map are consistent

Part 3: Cross-section – Fold Solution (9 pts)

- ___ units are extended above and below ground
- ___ fold pair is properly drawn to connect outcrops (2 pts)
- ___ anticline is labelled
- ___ syncline is labelled
- ___ axial plane for anticline is drawn correctly
 - vertical if upright folds
 - dipping towards east if asymmetric and/or overturned folds
- ___ axial plane for syncline is drawn correctly
 - vertical if upright folds
 - dipping towards the east if asymmetric and overturned folds
- ___ hinge zones are identified / labelled
- ___ principle stress directions drawn
 - horizontal arrows pointing towards the fault plane
- ___ name of fold (describing their geometry) is given (see answer key)

Total (/29): _____

Explanations for Areas of Misunderstanding

Area of Misunderstanding	Explanation