# Testing Polymer Gels for a Model Shipping Insert

Scoring guide · one credit per question · review written work against each rubric

### Testing Polymer Gels for a Model Shipping Insert

---

### Question 1

Links restrict how freely chains can slide and rearrange. In this model W has more links in the same volume, so it deforms less under the same load.

---

### Question 2

Choice (2)

V compresses by 8 mm and recovers 94%. U fails the recovery requirement. W fails the compression requirement.

---

### Question 3

It still meets the compression requirement because 8 mm is at least 6 mm. Its recovery of 86% is below 90%, so it no longer meets both requirements.

---

### Question 4

Measure percent height recovered after every test, using the same load and loading time, then find the first recovery below 90%. An equivalent repeated measurement with a fixed loading condition is acceptable.