📘 Teacher Answer Key — Jurassic Park (1993)

🧪 A. Science Connections — Suggested Answers

1. Scientists extract DNA from mosquitoes fossilized in amber, fill gaps with frog DNA.
2. Biotechnology involves **cloning and gene splicing.**
3. Real dinosaur DNA is too degraded — molecules break down after ~6.8 million years.
4. Ethical safeguards ignored: containment, consent, ecological balance.

🧠 **Teacher Note:** Clarify difference between **science fiction and real genomics.**

📊 B. Data & Analysis — Solutions

1. After 65 million years → DNA ≈ 0 % intact — impossible to clone.
2. $3billion \times 0.95 = 2.85billionbasesmustbecorrect.$
3. Corrupted DNA → mutations, deformities, or nonviable life forms.

🧠 **Teacher Note:** Demonstrate exponential decay and connect to radiometric dating.

🌎 C. Real-World Connection — Answers

1. Modern uses: gene therapy, GM crops, conservation genetics.
2. Ethics: IRB oversight, bioethics committees, international agreements.
3. Public dialogue prevents misuse and fear of science.

🧠 **Teacher Note:** Link to modern CRISPR debates or de-extinction projects.

💡 D. Reflection — Sample Responses

- “Science gives us power, but also responsibility.”
- “We must consider consequences before experimenting.”

🧠 **Teacher Note:** Use for discussion on ethics in innovation.

🌀 **Cross-Connection:**

Connect *Jurassic Park* to *Flubber* — both explore unintended results of scientific discovery, highlighting responsibility alongside curiosity.