Lesson Activity: The Power of Compound Interest and Long-Term Investing



Lesson Objective:

By the end of this lesson, students will understand how compound interest works and why long-term investing is valuable for wealth growth.

Materials:

- Whiteboard/Smartboard
- Calculator (or calculators on smartphones)
- Worksheet with compounding scenarios
- Visual aids (charts showing compound vs. simple interest growth)

Activity Steps:

1. Starter Discussion (10 minutes):

- Ask students what they know about interest and saving.
- Briefly explain simple vs. compound interest with examples (e.g., saving £100 with 5% interest per year).
- Emphasise that compound interest means "interest on interest," which accelerates growth over time.

2. Introductory Concept: Compound Interest Formula (10 minutes):

- Write and explain the formula for compound interest: A=P(1+rn)ntA = P (1 + \frac{r}{n})^{{n}}A=P(1+nr)nt
- Define each variable: principal (P), interest rate (r), number of times interest is compounded per year (n), and time (t) in years.

• Show a quick calculation example using £1,000, 5% interest, and 10 years.

3. Interactive Simulation (20 minutes):

- **Instructions**: Have students work in pairs and choose an investment amount (e.g., £500, £1,000) and a realistic interest rate (e.g., 5%, 7%).
- **Worksheet**: Provide scenarios with time horizons of 5, 10, 20, and 30 years.
- Students will calculate future values at each time point, filling in the worksheet as they go.
- Encourage them to adjust the interest rate or time to see the effect on future value.

4. Real-Life Application and Group Reflection (10 minutes):

- **Case Studies**: Share simple case studies (e.g., someone who invested young vs. later in life).
- Reflection: Ask, "What did you notice about the importance of starting early?" Discuss how long-term investing benefits from the "snowball" effect of compounding.

5. Wrap-Up: Personal Goals Discussion (10 minutes):

- Ask students to think about their own financial goals. When would they ideally want to start investing?
- End with a takeaway: Emphasise that even small amounts, invested early, can grow significantly over time.

Extension Activity:

Assign a "Research Your Investment Plan" homework where students choose an investment type (stocks, bonds, savings) and simulate returns over 10–20 years using online calculators.

