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| **XXX Secondary School****20xx-20xx****Business, Accounting, Financial and Studies Lesson Plan** |
| Subject: Business, Accounting, Financial and Studies | Topic: Accounting Equation 1  |
| Class: S4 (Business Management Strand) | Group size: 35 students | Class duration: 70 minutes (double lessons) |
| Student Prior Knowledge:1. Purposes and Roles of Accounting
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| Learning objectives: After this lesson, students are able to1. understand the accounting equation;
2. understand the three key components of the accounting equation: Assets, Capital and Liabilities, and state the relationships among them; and
3. analyse the effects of business transactions on the accounting equation.
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| Class activity: Questioning, Discussion, Verbal Explanation, Giving Examples, Group Activity, Business Transaction Analysis, Collaborative Learning and Competition |
| Teaching resources: PowerPoint Slides, Tablets/Computers, Teaching Notes, Classwork, Flowchart and Homework |
| Remarks for learner diversity: 1. If some students have lower self-esteem and motivation to learn, teacher can apply interactive learning mode with compliments and encouragement to help them build up their confidence.
2. If there is learner diversity in the subject learning, teacher can adjust teaching progress to cater to students with different learning progress by providing supplementary or additional explanations, clarifying concepts with more daily examples, simplifying or deepening the teaching content, asking simpler or more difficult questions, encouraging queries, arranging peer support in group work, offering individual guidance and supervision during classwork.
3. Time allocation for teaching and learning tasks can be adjusted.
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| Key Stage | Time Min | Strategies | Activity | Assessment for Learning  | Teaching Resources |
| Teacher | Students |
| **Introduction** | 7 | Questioning and Discussion | **Introduction of the topic: Accounting Equation** Arouse students’ interest in starting a business, and use the following leading questions to guide them to think and discuss: 1. Do you want to start a business? Take a tuck shop in school as an example. What are the major resources we need at the beginning?
2. Can you list out the things (or commonly known as assets) that a tuck shop "owns"?
3. As a tuck shop cannot make money in the phase of startup, how can the tuck shop "owns" these things/assets? Where does the money come from?
4. If we agree that a tuck shop can only obtain the things/assets it owns from the two main sources: (1) from the owner and (2) borrow from others, how can this relationship be presented in an equation?

  This presentation formed an Accounting Equation that can be applied to all types of business. In this lesson, students should learn: 1. Accounting Equation: Assets = Capital + Liabilities
2. The definition of Assets, Capital and Liabilities, and the relationships
 | Answer the questions. Expected answers/discussions:1. Yes, the major resources may include money, goods, store, etc.
2. Soda machine, cashier, tableware and furniture
3. Two main channels:

(1) from the owner(2) borrow from others1. The things/assets the tuck shop owns equal the total amount of money/resources from the owner and the amount of money/resources borrowed from others. The equation can be written as: The sum of the value of the things the tuck shop owns = the sum of the amount of money/resources provided by the owner + the amount of money/resources borrowed from others.

Pay attention and get ready to learn a new topic. | Formative AssessmentCheck students’ background knowledge on the major resources of a business based on their tuck shop in school through question 1.Check students’ understanding and relevant concepts of assets through open-ended questions 2 and 3. Students are invited to write and share their answers on the blackboard.Through question 4, ask students to form an equation to stimulate students’ learning and introduce the topic. Now students have a list of things/assets and the main sources of money/resources on the blackboard. Students are asked to choose the appropriate sign from “>”, “=”, ‘<” to express the relationship between the two items (through polling, etc.).Start the topic of accounting equation with relevant concepts | Write students’ answers on the blackboard to facilitate discussion and structure teaching contentRefer to Lesson 1 PPT P.3-4 Write the learning objectives on the blackboard.Refer to Lesson 1 PPT P.5-6 |
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| **Development****Learning objective: 1&2** | 10 | Verbal ExplanationGive examples | **Accounting equation and its three components** Explain the accounting equation to students.As mentioned earlier, a tuck shop cannot make money in the phase of the startup. It requires money from different sources such as owner’s (owners’) contribution or loan from bank(s).  So the accounting equation is presented as: Resources owned by a business (Assets) = Resources provided by the owner(s) (Capital) + Resources borrowed from others apart from the owner(s) (Liabilities)**Accounting Equation: Assets = Capital + Liabilities** **(A = C + L)**Teacher continues to explain to students about the three components of the accounting equation, the definitions and examples:* Assets: resources owned by a business
* Capital: resources provided by the owner(s)
* Liabilities: resources borrowed from others apart from owner(s)

Common examples:Assets: premises/ furniture / inventory / bank/ office equipment/ cash/ machine/ motor vanCapital: cash contribution by owner(s)and/or assets contribution by owner(s) for business use (e.g. vehicle)Liabilities: bank loan/ loan from friendsInstant feedback: Ask students to give examples of assets, capital and liabilities of businesses accessible in their daily lives e.g. a restaurant | Listen and jot notes if needed.Expected answers:Assets: cooking utensils, dried seafood, fresh food, cashier, tableware, furniture… - Capital: money or other cooking utensils provided by the owner; … - Liabilities: loan from bank/ friends, … | Formative AssessmentExplain the meaning of assets, capital and liabilities, and the relationship among them, and deepen students' understanding through daily examples.At the same time, accounting terms are introduced, and the mastery of terminology enters into conceptual understanding; from concrete to abstract, and from easy to difficult, deepening students’ understanding and thinking step by step.Ask students to give examples of assets, capital and liabilities of other businesses so as to test and/or deepen their understanding of assets, capital and liabilities. Demonstrate more examples to students to enrich their understanding of assets, capital and liabilities.Formative AssessmentAsk students to give examples to check their understanding of the three components of the accounting equation | Refer to Lesson 1 PPT P.7-8 Lesson 1 Note 1: P.1 |
| **Feedback of Learning****Learning objective: 1&2** | 5 | Give examples | Based on the tuck shop example, invite students to give examples of what assets, capital and liabilities and could be found in some other businesses, e.g. Pharmacy. 1. Take a tuck shop as an example. What assets, capital and liabilities does a tuck shop have?
2. How about a pharmacy? What assets, capital and liabilities does a pharmacy have?
3. Can you think of a business and suggest the assets, capital and liabilities involved?
4. Can you verbally explain the relationship among these three components in the accounting equation?
 | Answer questions.Expected answers:1. Tuck shop example:
* Assets: soda machine, cashier, tableware and furniture
* Capital: cash contribution by the owner
* Liabilities: loan from bank/ friends

2. Pharmacy example:* Assets: medicine, nutrition products, milk powder, cashier, delivery van…
* Capital: money or other assets provided by the owner
* Liabilities: loan from bank/ friends

3. No standard answers.4. Assets = Capital + Liabilities, resources owned by a company = resources provided by the owner(s) + resources borrowed from others apart from the owner(s)  | Formative AssessmentAsk students to give examples to check whether students can correctly distinguish among assets, capital and liabilities in a pharmacy and other businesses in questions 1-3Use think-pair-share to let students talk about their understanding of the accounting equation with their neighbours to share their thoughts before sharing with the whole class in question 4Refer to the tuck shop and the pharmacy examples as a basis to help students who cannot give examples and/or who cannot clearly explain the relationship of the three components in the accounting equation  Use students’ answers to supplement the explanation of the equation if necessaryBased on students’ answers give more explanation on the key points:Resources owned = resources from owner(s) + resources from others apart from the owner(s)Assets = Capital + Liabilities | Refer to Lesson 1 PPT P.9 |
| **Development****Learning objective: 2** | 10 | Group Activity Verbal ExplanationTransaction Analysis | Based on students’ understanding of how A= C+L form the accounting equation in the examples of a tuck shop and pharmacy, the following questions are raised for a group activity to (1) scaffold students’ understanding of the components and their relationship in the accounting equation, (2) cater for learner diversity, and (3) pave the analysis of the effects of the business transactions on the accounting equation. 1. What is the meaning of A=C+L? (Elementary level: repeat and recite the basic concept already known)
2. What is the difference between A=C, A=L and A=C+L? (Standard level: compare the differences among the components)
3. What is the meaning of C=A-L? (Advanced level: get a new perspective of the accounting equation by moving the components in the equation)

Use the following business transactions to teach students to identify the relationships of Assets, Capital and Liabilities in the accounting equation. Visualise the transaction effects on the blackboard:The tuck shop owner contributes $10,000 equipment to the tuck shop and borrows $50,000 from the bank for daily operation use.(Equipment and bank both belong to Assets; owner’s contribution belongs to Capital; Loan from Bank belongs to Liabilities)Effects: Assets↑ $60,000 (Equipment $10,000 + Bank $50,000) = Capital↑ $10,000 + Liabilities ↑ $50,000Instant feedback A book store’s owner (1) injects $20,000 into the book store and deposits it into the bank, and (2) buys a motor van $50,000 for book delivery. How will these business transactions affect the accounting equation? | Expected answers: 1. Assets = Capital + Liabilities, a business’s resources are provided by the owner(s) and others apart from the owner(s)
2. A=C means the owner(s) provide(s) all the resources to the business; A=L means that all the resources to the business are provided by others apart from the owner(s); A=C+L means all the resources to the business are provided by the owner(s) and others apart from the owner(s)
3. C=A-L means the resources provided by the owner(s) or the net assets of the firm

Expected answers: Effects: Assets↑$70,000 (Bank $20,000 + Motor Van $50,000) = Capital↑ $70,000 ($20,000 + $50,000) | Formative AssessmentUse “group activity” to enable students to comprehend and/or check for their understanding of the components and their relationship in the accounting equation.Ask students to work on their own first and then discuss with the group members. Ask (a) group(s) to explain the answers of questions 1-3 in the class.Use students’ answers to supplement the explanation of the components and their relationship in the accounting equation if needed. Formative AssessmentUse business transactions to facilitate students’ learning on the effects on the accounting equation.If students are unable to write or show the effects of the accounting equation, the following analytical steps can be highlighted: 1. identifying the items (accounts) and amount to be affected by the transaction
2. double-checking which items (accounts) are to be affected at a time (at least two items)
3. marking the effects of the transaction (increased, decreased or unchanged) on the relevant items of the accounting equation
4. double-checking if the accounting equation remains balanced after marking the effects

For higher achievers, they are required to draw a diagram/flow chart to illustrate the effects of a business transaction on the accounting equation. | Refer to Lesson 1 PPT P.10 |
| **Consolidation of Learning objective: 1&2** |  | Questioning  | Ask students the following questions:1. What are the three components of the accounting equation? What is the equation?
2. Give an example of each of the three components of the accounting equation.
3. Can the owner provide resources other than money to the business?

Challenging Question1. Why do both sides of the accounting equation always balance? | Expected answers:1. Assets = Capital + Liabilities
2. Assets: Cash

 Capital: money supply by the owner Liabilities: Loan from bank1. Yes, the owner can also provide other resources such as vans/ machine

Challenging Question1. Resources owned by a business = Resources provided by the owner(s) + Resources borrowed from others apart from the owner(s) | Formative AssessmentUse open-ended questions to recap and assess students’ learning progress of the accounting equation through inviting students to write their answers on the board and taking a vote for the correctness of the answers in class.Ask students to explain their voting choices and help those who cannot identify and/or explain the correct answers.For lower achievers, use the flowchart to illustrate the effects of business transactions on the accounting equation as well as the answers of the questions.Ensure that students understand the accounting equation, the relationship of its three components, and that both sides of the equation always balance. | Refer to Lesson 1 PPT P.11Refer to “Flowchart” |
| **Development of new knowledge****Learning objective: 3** | 20 | Questioning Verbal Explanation  | **Effects of business transactions on the accounting equation**Prepare and distribute different colour signs marked with “Assets↑”, “Assets↓”, “Capital ↑”, “Capital ↓”, “Liabilities ↑”, “Liabilities ↓”, and ask students about the effects of business transactions on the accounting equation. Students respond to the teacher’s questions by showing and lifting up the appropriate sign. If students answer wrongly, teachers can follow up with the students instantly. Keep asking students key questions: 1. Which items of the accounting equation have been affected?
2. What are the changes?
3. Would the accounting equation remain balanced?

**Effects of business transaction on the accounting equation:**1. The owner introduced capital.
* Assets increased. Capital increased.
* Total amount increased.

The owner introduced $50,000 cash to the business.(Cash is an Asset. Owner’s contribution is Capital.)Effects: Assets↑ $50,000 (Cash); Capital↑ $50,000 (Capital)1. Bought an asset by cheque
* Assets increased. Assets decreased.
* Total amount remained unchanged.

The firm bought a van to deliver goods for $30,000 by cheque.(Van is an asset. Bank is an asset.)Effects: Assets↑ $30,000 (Van); Assets↓ $30,000 (Bank)1. Bought an asset on credit
* Assets increased. Liabilities increased.
* Total amount increased.

The firm bought a non-trading motor van for $4,000 from ABC Company on credit.(Motor van is an Asset. Other payables - ABC Company is a Liability.)Effects: Assets↑ $4,000 (Motor van); Liabilities↑ $4,000 (Other payables - ABC Company)1. Borrowed money from people other than the owner
* Assets increased. Liabilities increased.
* Total amount increased.

The firm borrowed $20,000 from a bank.(Bank is an Asset. Loan from Bank is a Liability.)Effects: Assets↑ $20,000 (Bank); Liabilities↑ $20,000 (Loan from bank)1. Repaid Liabilities
* Assets decreased. Liabilities decreased.
* Total amount decreased.

 The firm repaid $10,000 for the bank loan.(Bank is an Asset. Loan from Bank is a Liability.)Effects: Assets↓ $10,000 (Bank); Liabilities↓ $10,000 (Loan from bank)1. Sold a non-current asset on credit at cost
* Assets decreased. Assets increased.
* Total amount remained unchanged.

The firm sold an old machine $6,900 at cost to the SKH company on credit.(Machine is an Asset. Other receivables - SKH company is an Asset.)Effects: Assets↓ $6,900 (Machine); Assets↑ $6,900 (Other receivables - SKH company)Ask students if they have any questions on the transactions. | Pay attention in class, listen to teacher’s explanation and jot notes if needed.Try to respond to teacher’s questions by showing and lifting up the appropriate sign.Try to understand the concepts and ask teacher questions about the topic. | Formative AssessmentUse colour signs for students to indicate their responses to the effects of the business transactions on the accounting equation.Use questioning to let students learn and gain better understanding of the effects of business transactions on the accounting equation (assets, capital and liabilities).Use the flowchart to facilitate students’ in identifying the effects of business transactions:1. identifying the items (accounts) and amount to be affected by the transaction
2. double-checking which items (accounts) are to be affected at a time (at least two items)
3. marking the effects of the transaction (increased, decreased or unchanged) on the relevant items of the accounting equation
4. double-checking if the accounting equation remains balanced after marking the effects
 | Refer to Lesson 1 PPT P.12-17andLesson 1 Note 1 P.2Refer to “Flowchart” |
| **Consolidation of learning** **Learning objective: 3** | 15 | Collaborative Learning & Competition | Consolidate the key concepts through collaborative learning and competition activities.1. Ask students to form groups of 2-4. Distribute the worksheet and instruct students to collaborate with partners. Deepen students’ knowledge of effects of business transactions on the accounting equation through this exercise.
2. Ask students to finish the questions and write down the answers on the worksheet. The fastest group with correct answers will be the winner of this competition.
3. Which items (accounts) of the accounting equation are affected in each of the following business transactions?
4. What are the changes?
5. Would the accounting equation remain balanced?

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| Transactions | Which items (accounts)\* of the accounting equation are affected? | Show the effect (Increase or Decrease). | Would the accounting equation remain balanced? |
| 1) The owner introduced $50,000 cash to the business. | Assets(Cash) | ↑ $50,000 | It would remain balanced. |
| Capital(Capital) | ↑ $50,000 |
| 2) The firm bought a motor van (for operation) for $6,000 from ABC Company on credit. | Assets(Motor van) | ↑ $6,000 | It would remain balanced. |
| Liabilities(Other Payables) | ↑ $6,000 |
| 3) The firm bought a factory for production for $900,000 in cash. | Assets(Cash) | ↓ $900,000 | It would remain balanced. |
| Assets(Factory) | ↑ $900,000 |
| 4) The firm borrowed $30,000 from a bank. | Assets(Bank) | ↑ $30,000 | It would remain balanced. |
| Liabilities(Loan from Bank) | ↑ $30,000 |
| 5) The firm repaid $25,000 for the bank loan by cheque. | Assets(Bank) | ↓ $25,000 | It would remain balanced. |
| Liabilities(Loan from Bank) | ↓ $25,000 |
| 6) The business sold old office furniture $3,500 on credit at cost. | Assets(Other Receivables) | ↑ $3,500 | It would remain balanced. |
| Assets(Office furniture) | ↓$3,500 |

\* Teachers can decide whether to mention ledger accounts according to student learning progress.1. Check the answers.
2. Question students to guide them to advanced thinking of the topic. Do you notice anything special when you record how business transactions affect the accounting equation?
 | 1. Pay attention to teachers’ instructions.
2. Read the questions carefully and understand the requirement of the questions.
3. Follow the flowchart to get the solutions.
4. Answer the questions.
5. Discuss and check the answers.
6. Consult the teacher if you have any questions.

Expected answers: Business transactions may change the total of the accounting equation, but the accounting equation always remains balanced. | Formative Assessment Students complete the questions in groups, write and comment answers on the blackboard. Check if students are familiar with the effects of different business transactions on the accounting equation and comment on the answers presented by other groups.Teacher follows up to clarify concepts and highlight some points when answering the questions.Check students’ analytical steps (1) – (4) below: 1. identifying the items (accounts) and amount to be affected by the transaction
2. double-checking which items (accounts) are to be affected at a time (at least two items)
3. marking the effects of the transaction (increased, decreased or unchanged) on the relevant items of the accounting equation
4. double-checking if the accounting equation remains balanced after marking the effects

  | Lesson 1 Classwork 1Refer to Lesson 1 PPT P.18-19 |
| **Summary**  | 3 | Summary | Summarise the class exercise and review the key point of today’s lesson.* Accounting Equation: Assets = Capital + Liabilities
* Definition:

Assets: resources owned by the businessCapital: resources provided by the owner(s)Liabilities: resources borrowed from others apart from the owner(s)* Business transactions may change the total of the accounting equation, but the accounting equation always remains balanced.

Accounting Equation: Assets = Capital + Liabilities　　Encourage students to ask questions about their queries by raising their hands at once or marking them down on a piece of paper.Inform students that all questions or responses in class will be counted as active participation in class learning and contributed to their learning.Invite students to opt for the best three questions they raised to promote appreciation and respect of asking questions.Assign homework to students to consolidate the knowledge learned in this class, including classifying the assets, capital and liabilities, answering the MC questions to check their understanding of the definitions of the key components in the accounting equation and the identification of the effects of business transactions on the accounting equation. Encourage students to list their own financial status based on the accounting equation and prepare students to get into the next lesson. | Summarise and review the concepts and content learned in this lesson.1. Summarise the common errors and misconceptions the teacher has mentioned.
2. Ask questions.
3. Complete and submit the homework on time.
 | Summative assessmentUse common errors and misconceptions from students to explain the concepts again.Ask students to reflect on their common errors and misconceptions as well as to correct them and give explanations. | Lesson 1 Homework 1Refer to Lesson 1 PPT P.20-21 |

Reference:

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