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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 2 |
| Class: S4 (Business Management Strand) | Group size: 35 students | Class duration: 70 minutes (double lessons) |
| Student Prior Knowledge:1. Understand the accounting equation.
2. Define the three key components of the accounting equation: Assets, Capital and Liabilities, and state the relationships among them.
3. Analyse the effect of business transactions on assets, capital and liabilities in the accounting equation.
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| Learning objectives: After this lesson, students are able to1. explain the meaning of revenues, expenses and drawings, and their relationship with capital; and
2. analyse the impact of business transactions on the accounting equation.
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| Class activity: Answer Checking, Questioning, Discussion, Live Polling, Demonstration, Collaborative Learning  |
| Teaching resources: PowerPoint Slides, Tablets/Computers, Teaching Notes, Classwork, Illustrated 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 | TimeMin | Strategy | Activity | Assessment for Learning  | Teaching Resources |
| Teacher | Students |
| **Check Homework and review**Raising Motives | 15 |  Answer Checking & QuestioningLive Polling Questioning | Check Homework (HW) 1 and review.Review the key points of the accounting equation taught in the previous lesson through checking HW and asking the following guiding questions.1. What is the accounting equation?
2. MC Q1

As we know that the accounting equation is A=C+L, can we express it as C+L=A? What does C+L=A mean? (More in-depth question: Can the accounting equation be expressed as A+L=C, A=L-C and A+C=L?) What is the correct answer of MC Q1?1. MC Q3

How about these equations? Are they correct? 1. A>L+C,
2. A=C+L,
3. L can be larger than C
4. MC Q2

What are the definitions of the three components in the accounting equation? What is the correct answer of MC Q2?1. Part 2 Q1

Can you give two examples of Capital in answering Part 2 Q1?How about the examples of Assets and Liabilities? 1. Part 2 Q2

According to the accounting equation A=C+L, how can you calculate the unknown figures? Can you summarise the major methods of calculating the unknown figures of A, L and C?1. Part 2 Q3

How do the transactions affect the assets, capital, liabilities and the accounting equation? What are the key effects of these transactions? Use a blackboard or an online platform to conduct live polling as below:a. Show the following transactions/accounts on the blackboard or an online platform. Ask students to give answers of agree, disagree or I don’t know for questions Q1-3.1. The owner puts cash into the business (Increase in assets, increase in capital). 2. Borrow money from a person other than the owner (Decrease in liabilities, decrease in assets).3. The owner takes goods for private use (Increase in capital, increase in liabilities).Classify the accounts into Assets (A), Capital (C), Liabilities (L) or I don’t know4. Furniture, Motor van, Equipment, Purchases, Premises, Sales and Machineb. Invite some students to give the answers for conducting live polling of ‘agree, disagree or I don’t know’.c. Highlight all ‘I don’t know’ items and they will be taught in this lesson.  After reviewing and ensuring that students have mastered the content taught in previous lesson, the teacher introduces new learning content. Leading questions: 1. How does a business calculate profit or loss?
2. How does this calculation relate to the accounting equations you have learnt?

Using the accounting equation to reflect the revenues and expenses of the enterprise is today's teaching topic. The focus includes the definitions of revenues, expenses and drawings, their relationship with capital, as well as their effects on the accounting equation.  | Answer the questions. Expected answers:1. Accounting equation: Assets = Capital + Liabilities
2. Yes, A=C+L can be expressed as C+L=A. It means that the total resources of a business owned (Assets) is equal to the sum of the resources provided by the owner(s) (Capital) and resources borrowed from others apart from the owner(s) (Liabilities). (Answers of in-depth questions: No, they are not in line with the accounting equation A=C+L). The correct answer of MC Q1 is B.
3. Only (2) and (3) are correct. Option (1) violates the accounting equation, A=C+L. The correct answer of MC Q3 is C.
4. Definitions: Assets mean the resources owned by a business. Capital means the resources supplied to a business by its owner(s). Liabilities mean the resources borrowed from others apart from owner(s).

The correct answer of MC Q2 is C.1. Examples of assets - cash, machine; Examples of capital - cash contribution by owner(s) and machine contribution by owner(s); Examples of liabilities – bank loan, loan from friends
2. See answers in the answer sheet. Major calculation ways:

(a) & (f) L+C =A(b) & (e) A-C=L(c) & (d) A-L=C7. Refer the answer in HW Worksheet 1.Expected answers of live polling of agree, disagree or I don’t know:1. Agree2. Disagree3. I don’t know4.Furniture – AMotor van – AEquipment – APurchases – I don’t knowPremises – ASales – I don’t knowMachine – AExpected answers:　 1. Revenues minus Expenses
2. The accounting equation reflects the revenues and expenses of the business. They are closely related to the three unknown transactions being identified in the live polling.

Be focused and start learning a new topic. | Formative assessmentUse questions 1-3 to recap the key learning elements of the previous lesson.Check if students follow the steps learnt in previous lesson to think about the effects of transactions on the accounting equation.Invite students to show their calculation and check their level of understanding of the accounting equation.Observe and point out the common mistakes in answering the HW questions, ask students to sort the problems out and give correct answers. If needed, teacher provides assistance to students through clarification and highlighting the key learning points. Distribute the marked HW (if any) and point out the common mistakes to provide assistance to students through clarification and highlighting of the key learning points. Formative assessment Use the live polling to arouse students’ interest and assess their understanding of assets, capital and liabilities.Use the instant polling results to assess that the majority (80-100%) of students can get the correct answer in each transaction, otherwise, explanation on the specific transaction can be repeatedly given till the majority of students get the correct answer.Introduce the terms that are related to revenues and expenses in business running, including purchases and sales.Formative assessment Use the leading questions to link the discovery results with the accounting equation.Ask students to further reflect on the accounting equation and try to calculate profit/loss. | Refer to Lesson 2 PPT P.3-7Refer to Lesson 2 PPT P.8-9 |
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| **Development:Learning objective 1** | 1515 | Verbal Explanation QuestioningVerbal ExplanationQuestioning QuestioningVerbal Explanation and Demonstration Verbal Explanation and Demonstration Questioning  | **Part 1 - Accounting Equation****Definition of goods, on credit, credit purchases and credit sales**Ask students to brainstorm the meaning of “goods”, “purchases”, “sales” and “on credit” since they are common ways of trading in real business.Clarify the meaning of goods by using more real-life examples in different business sectors and industries, e.g. jeans/shirt/dress - goods of a clothing store**Instant feedback*** + - 1. Can you give an example of goods in a specific business?

2. Are there any other ways for purchases and sales of goods apart from on credit?**Definition and examples of revenues and expenses*** Revenues are earned and expenses are incurred by a business during its operation.
* Revenues: income earned from sales of goods or provision of services to customers
* Expenses: costs incurred to generate revenues

What are the revenues and expenses of a school tuck shop?(To check if students can correctly distinguish between revenues and expenses.)**Instant feedback**Give several examples of common business revenues and expenses for students to distinguish:sales/ commission revenues / interest income/ electricity/ rental expenses/ staff salary **Relationship among revenues, expenses and capital** Leading question:How can we know the profit/loss of a business?Revenues - Expenses = Profit/LossRevenues > Expenses => Profit;　Capital**↑**Revenues < Expenses => Loss;　 Capital**↓**The profit/loss of a business will directly affect the increase or decrease in capital since the profit/loss of a business would be taken by the owner(s). Revenues are added to capital while expenses are deducted from capital. Therefore the accounting equation can be expressed as: Assets = Capital + (Revenues - Expenses) + Liabilities**Part 2 - Effects of Business Transactions on Accounting Equation**1. Paid expenses
* Expenses increased. Assets decreased.
* Total amount decreased.

The firm paid salary $1,690 in cash. （Salary is an expense. Cash is an asset.）Effects: Expenses ↑ $1,690 (Salaries); Assets ↓ $1,690 (Cash) 1. Received bank deposit interest
* Assets increased. Revenues increased.
* Total amount increased.

The firm received bank interest $2,400.（Bank is an asset. Interest Income is a revenue.）Effects: Assets ↑ $2,400 (Bank); Revenues ↑ $2,400 (Interest Income)1. Bought goods from suppliers on credit
* Expenses increased. Liabilities increased.
* Total amount increased.

The firm bought goods $4,500 from a supplier on credit.（Purchase is an expense. Trade Payable is a liability.）Effects: Expenses ↑ $4,500 (Purchases); Liabilities ↑ $4,500 (Trade Payables)1. Sold goods to customers on credit
* Assets increased. Revenues increased.
* Total amount increased.

The firm sold goods $3,200 to customer on credit.（Trade Receivable is an asset. Sale is a revenue.）Effects: Assets ↑ $3,200 (Trade Receivables); Revenues ↑ $3,200 (Sales) Teachers challenge students to further expand the accounting equation using the example of the school tuck shop.　Leading question: Take the school tuck shop as an example. If the owner withdraws some snacks for personal use, which items of the accounting equation would be affected?If the owner withdraws resources from the firm for personal use, it is drawings. The amount of drawings affects capital and is deducted from capital. The effects in the accounting equation will be: 1. Owner withdrew for personal use
* Drawings increased. Assets decreased.
* Total amount decreased.

The owner withdrew cash $2,000 for personal use. (Owner’s withdrawal is drawings. Cash is an asset.)Effects: Drawings ↑ $2,000 (Drawings); Assets ↓ $2,000 (Cash)**Revenues, expenses and drawings are added to or deducted from capital. Therefore, the accounting equation can be expressed as:** **Assets = Capital + (Revenues – Expenses)－Drawings + Liabilities** | Listen and jot notes if needed.Try to answer the question.Expected answers:1. Diamond is an example of goods of a jewellery shop. Television is an example of goods of an electrical appliances company.2.Cash purchases and cash salesExpected answers:Revenues: salesExpenses: rent/electricity/water/staff salaryExpected answers**:**Revenues: sales/ commission revenues/ interest incomeExpenses: electricity/ rental expenses/ staff salary Expected answer:Revenues – Expenses Expect answers:Leading question: Decrease in Assets and Decrease in Capital | Formative assessmentAsk students to give examples to share and apply their understanding of ‘goods’ in a business.Help students clarify credit purchases and credit sales by comparing with cash purchases and cash sales.Formative assessmentCheck students’ concepts by asking them whether they agree (raise up their hands) or disagree (hold up their hands) to the definition and examples of revenues and expenses. Follow up with verbal explanation on their agreement and disagreement. From students’ responses, check students’ understanding of revenues and expensesFormative assessmentUse the leading question to assess students’ knowledge on the relationship among revenues, expenses and capital, and their impacts on the accounting equation.Formative assessmentUse students’ direct responses to assess their understanding of the effects of business transactions on accounting equation. Check students’ application of the 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

Formative assessmentUse the leading question to facilitate students’ learning and understanding of the concept of drawings.  | Refer to Lesson 2 PPT P.10Refer to Lesson 2 PPT P.10 Lesson 2 Note 2 P.1Refer to Lesson 2 PPT P.11-12 Lesson 2 Note 2 P.2Refer to Lesson 2 PPT P.14-17 Lesson 2 Note 2 P.3Refer to Lesson 2 PPT P.18-19 Lesson 2 Note 2 P.4 |
| **Consolidation of learning objective 3** | 20 | Collaborative learning | Distribute a piece of paper and instruct students to form groups with classmates (3-4 students) nearby. Deepen students' understanding of the effects of business transactions on the accounting equation through classwork. Each group creates at least 1 question on Accounting Equation and 1 question on business transaction for another group to answer. Each group is also responsible for checking the answer to respective questions. 1. Instruct students to create the questions and prepare the answers for discussion.
2. Create the questions with students if they need help or give examples of how to create questions.

Examples of questions: * What is the accounting equation?
* What assets would be included in a restaurant?

Examples of business transactions:

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| Business transactions | Which items (accounts)\* of the accounting equation are affected? | Show the effect (Increase or Decrease). | Would the accounting equation remain balanced? |
| a) Paid rent $5,000 in cash | Expenses(Rent) | ↑$5,000 | It would remain balanced. |
| Assets(Cash) | ↓$5,000 |
| b) The owner withdrew office equipment $3,000 for personal use. | Drawings(Drawings) | ↑ $3,000  | It would remain balanced. |
| Assets(Office Equipment) | ↓ $3,000 |
| c) The firm received bank interest $1,500. | Assets(Bank) | ↑ $1,500 | It would remain balanced. |
| Revenues(Interest Income) | ↑ $1,500 |
| d) Paid electricity $2,500 by cheque | Expenses(Electricity) | ↑ $2,500  | It would remain balanced. |
| Assets(Bank) | ↓ $2,500 |
| e) Received cash commission $3,000.  | Assets(Cash) | ↑ $3,000 | It would remain balanced. |
| Revenues(Commission Revenue) | ↑ $3,000 |

\* Teachers can decide whether to mention ledger accounts according to students’ learning progress. 1. Go through the questions one by one and lead students to further think about the topic.
2. Highlight common mistakes and remind students to avoid them.
 | 1. Listen carefully and follow the instructions.
2. Read the questions and understand the requirements of the questions.

Expected answers: Accounting equation: Assets = Capital+ LiabilitiesOrAccounting Equation: Assets + Expenses+ Drawings = Capital + Revenues+ LiabilitiesAssets of a restaurant: Table / tableware/ chairs/ cashier 1. Discuss with the teacher and check the answers.
2. Ask questions.
3. Complete Lesson 2 Classwork 2.
 | Summative assessmentUse the accounting equation and business transaction questions in collaborative learning to facilitate students’ learning of the accounting equation with peer support.Help students clarify the related concepts by checking their proper use of the following key steps:　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 2 PPT P.20 Lesson 2 Classwork 2  |
| **Summary** | 5 | Conclude  | 1. Emphasise and review the key points of the lesson:
* Definition of revenues, expenses and drawings
* Relationship among revenues, expenses, drawings and capital
* The effects of business transactions on accounting equation
1. Resolve students’ queries regarding today’s topics.
2. Guide students in drawing a flowchart for the accounting equation so as to deepen their understanding of the topic.
3. Assign homework to students in order to consolidate the knowledge learned in this lesson.
 | 1. Conclude and review the knowledge learned in today’s lesson.
2. Conclude the common mistakes and avoid them.
3. Ask questions to clarify any unclear points.
4. Complete the flowchart.
5. Complete and hand in homework on time.
 | Help students summarise the knowledge by reviewing the key points of the lesson and drawing the flowchart of the accounting equation. | Refer to Lesson 2 PPT P.21-22 Lesson 2 Homework 2 |

**Reference:**

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