COURSE NAME: Computer Applications 8

UNIT: Check Writing | **NO. OF DAYS: 4**

KEY LEARNING(S): Budgeting, Personal Finance, Money Management

UNIT ESSENTIAL QUESTIONS: How do I write a check and keep track of my money in a bank?

COMPETENCY: Students will be able to complete a deposit slip
Write a check
Record a transaction in a check register
Maintain a correct balance in the check register
Reconcile and account

CONCEPT	FORMATIVE ASSESSMENTS	SUMMATIVE ASSESSMENTS	SUGGESTED INSTRUCTIONAL ACTIVITIES
Responsibilities and consequences are associated with managing personal finances	Listening guides Vocabulary activities Study Skills	Pre-Test Completing of accurate checks Completion of accurate deposit slips Completion of Check Register Post-Test	Use online check writing activities

COURSE NAME: Computer Applications 8

UNIT: Programming Karel | **NO. OF DAYS: 20**

KEY LEARNING(S): Learning to program a 'dog' to function in a computer world

UNIT ESSENTIAL QUESTIONS: What is programming and what is the connection between humans and computers?

COMPETENCY: Students will be able to explain the commands Karel can be given
will learn about Karel's 'World' and the ways that Karel can interact with it.
teach new words or commands through the use of functions

CONCEPT	FORMATIVE ASSESSMENTS	SUMMATIVE ASSESSMENTS	
• Understand what functions are for and how using them improves programs • Explain the importance of writing readable code, and analyze and compare readability of different programs • Break a large problem down into smaller pieces	Videos Example Programs	Quiz Exercises	Use www.CodeHS.com to complete assignments/exercises/assessments

• Write methods to solve each smaller problem • Solve a complicated problem using Top Down Design • Identify good and poor decomposition • Explain preconditions and post conditions of a function • Create clear and readable comments in code that help the reader understand the code • Explain the purpose • Create for loops to repeat code a fixed number of times • Explain when a for loop would be a useful tool • Utilize for loops to write program that would be difficult/impossible without loops • Use conditions to gather information about Karel's word • Create if statements to execute code if a certain condition is true • Explain the purpose of an If/Else statement • Create If/Else statements to solve new types of problems • Identify when an If/Else statement is appropriate to be used • Explain the purpose of a while loop			

• Create while loops to repeat code while a condition is true • Utilize while loops to solve new types of problems • Test solutions on different worlds • Combine control structures to solve complicated problems Choose the proper control structure for a given problem			