```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Empowering Learning: Numeracy</title>
    <script src="https://cdn.tailwindcss.com"></script>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link
href="https://fonts.googleapis.com/css2?family=Inter:wght@400;600;700&display=swap"
rel="stylesheet">
    <style>
        body {
            font-family: 'Inter', sans-serif;
            background-color: #f3f4f6;
            scroll-behavior: smooth;
        }
        .container {
            max-width: 800px;
            margin: 0 auto;
        }
        .card {
            background-color: #ffffff;
            border-radius: 12px;
            box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
            padding: 24px;
        }
        .drag-item {
            cursor: grab;
            transition: transform 0.1s ease-in-out;
        }
        .drag-item:active {
            cursor: grabbing;
            transform: scale(0.95);
        }
        .drop-target {
            min-height: 4rem;
            display: flex;
            align-items: center;
            justify-content: center;
            text-align: center;
        }
    </style>
</head>
<body class="bg-gray-100 p-8">

    <!-- Header Section -->
```

```
  <header class="text-center mb-12">
    <h1 class="text-4xl font-extrabold text-gray-900 mb-2">Empowering Learning: Numeracy</h1>
    <p class="text-xl text-gray-600">A new perspective on learning</p>
  </header>

  <div class="container space-y-12">

    <!-- Module 1: Introduction -->
    <section id="module1" class="card">
      <h2 class="text-2xl font-bold text-gray-900 mb-4">Module 1: Introduction</h2>
      <p class="text-gray-700 mb-4">Hello welcome to the Empowering Learning for numeracy programme. This is gonna be a nice short course to start to help you understand: 1) why numbers are the way they are and 2) how we can use number triangles to help us with our addition, subtraction, multiplication and division. It's very straightforward. It's gonna use a lot of the techniques in the Empowering Learning Spelling. So let's jump right in!</p>
    </section>

    <!-- Module 2: The Optimal Learning State -->
    <section id="module2" class="card">
      <h2 class="text-2xl font-bold text-gray-900 mb-4">Module 2: The Optimal Learning State</h2>
      <p class="text-gray-700">Okay before we get started, first things first, if you've done the Empowering Learning Spelling programme, you'll know that we need to get into the optimal learning state. For me personally I prefer the Big Strong Tree and the Box Breathing. They worked really really for me, but for you, you may have found a different way to do it. So if you haven't done it yet, jump into the Optimal Learning State course and you will learn a few different techniques that will help you to get yourself into the best position to be able to learn. Right, go give it a go and when you're ready let's jump into the next module. That's so simple!</p>
    </section>

    <!-- Module 3: Why Numbers Are Shaped The Way They Are -->
    <section id="module3" class="card">
      <h2 class="text-2xl font-bold text-gray-900 mb-4">Module 3: Why Numbers Are Shaped The Way They Are</h2>
      <p class="text-gray-700 mb-4">Okay, before we delve into the actual technique, it is interesting to know why numbers are the way they are? Why is a one like a one? Why is a five like a five? Well it goes right back to ancient times where it's to do with the amount of angles that there are in the number. So on number one we had one angle. In two we had two. In number three, 1, 2, 3 and so on and so on. As you can see, I'm very good at art, but then when they got to nine, there was no more, so they had to come up with one with no angles that could be added to any number to create infinity and that's why we have infinity numbers. It's a really interesting little fact but it's a simple thing to help us try and remember that amount of angles are related to the number. So there you go, go and practise your angles, try and remember them and then we'll move onto the next module where we'll use the Empowering Learning technique to help you add, subtract, multiply and divide much easier.</p>
```

```
</section>

<!-- Module 4: The Technique -->
<section id="module4" class="card">
  <h2 class="text-2xl font-bold text-gray-900 mb-4">Module 4: The Technique</h2>
  <p class="text-gray-700 mb-4">Okay, before you dive into this, you need to have done the Empowering Learning Spelling programme. It's very quick. It's very short so if you haven't please go back and do that because that gives you the foundation that your gonna use to do the mathematics and numeracy. If you remember, we all went through picturing the nouns in our heads, the dogs, the cats, the tigers and then we moved onto the swan and we got the swan to swim away and leave the words on your brand-new whiteboard. So we're gonna use that whiteboard again. Parents, draw a triangle and put some numbers in it, with the largest number at the top and then the numbers that add up to it that you want to focus on in the other two corners. Add the two minus (-) signs on the sides and the plus (+) at the bottom. Hold it up to where their visual field is and ask them to place the number triangle on the whiteboard. When they have it, you take the post-it note down and you ask them, "What does x+x make?" and they will be able to picture it and see that the two numbers at the bottom is a plus and adds to the number on the top. Then you can check what does x-x and they will know that the number on the top minus one of the numbers on the bottom gives you the answer of the number in the other corner. We can do the exact same thing for multiplication and division. Just replace the minus (-) and plus (+) signs in the number triangle with divide (÷) and multiply (x) signs and the correct numbers in place. Don't rush through this really fast, take the time and try and work with where your child is at in terms of school. Remember it's okay for all of us to make mistakes. Practice for five minutes a day.</p>
</section>

<!-- Module 5: Conclusion -->
<section id="module5" class="card">
  <h2 class="text-2xl font-bold text-gray-900 mb-4">Module 5: Conclusion</h2>
  <p class="text-gray-700">OK hope your practice has gone well. Hopefully you guys will be seeing improvements like we've seen with the hundreds of young people that we have worked with over the years and that it is making learning so much easier for your children. If you've got concerns over their handwriting or their reading, jump into those courses cause they're even simpler. So, I hope you've enjoyed the Empowering Learning Numeracy course, well done for completing it and yeah, you've got this.</p>
</section>

<div class="w-full h-px bg-gray-300 my-12"></div>

<!-- Deep Dive Course Section -->
<section id="deep-dive" class="card space-y-8">
  <h2 class="text-3xl font-bold text-gray-900">Deep Dive Course: Extended Learning</h2>
  <p class="text-gray-700">Now that you've completed the foundational course, it's time to take a deeper look at the principles behind the Empowering Learning methodology. This section expands on each module, providing additional context, neuroscience, and practical tools to further enhance your learning journey.</p>
```

<hr class="border-gray-300">

<!-- Deep Dive Module 1 -->

<h3 class="text-2xl font-bold text-gray-800">Module 1 Deep Dive: The Power of Intentionality in Numeracy</h3>
The introduction to our main course, while brief, hints at a powerful idea: **intentionality**. This is the conscious practice of setting aside a few minutes every day to focus on a new skill. It's not about the quantity of time, but the quality of focus. The brain, particularly for a young person, learns best when it is given clear, consistent, and short bursts of focused attention. This intentionality builds a habit, and habits are the foundation of long-term improvement. The science behind this is **neuroplasticity**—the brain's ability to reorganize itself by forming new neural connections. Your daily practice, no matter how brief, is what strengthens these pathways over time, leading to significant and lasting improvement.

Real-World Connection:
Think about a professional athlete. They don't just "show up" and play. They spend focused, intentional time on specific drills—practicing a free throw, a specific footwork pattern, or a passing technique. The consistency of this deliberate practice, even for a few minutes a day, is what allows them to perform flawlessly under pressure. That same intentionality is what you're building with your numeracy practice. You're training your brain to see numbers not as a source of stress, but as a series of patterns it can master with focused effort.
Learning Moment:
Remember that every small step is a building block. You're not just practicing numeracy for five minutes; you're actively strengthening your brain's ability to focus and learn. Be proud of the habit you are building, because it is the single most important factor in your long-term success. What new skill will you apply this intentionality to next?

<!-- Deep Dive Module 2 -->

<h3 class="text-2xl font-bold text-gray-800">Module 2 Deep Dive: The Science of Learning</h3>
The core principle of this module is to get into an **optimal learning state** by calming the nervous system. The science behind this is understanding the **fight-or-flight response**. When we are stressed or anxious, our sympathetic nervous system is activated, releasing hormones like adrenaline and cortisol. This state is designed for survival, not for learning. By engaging in grounding techniques, you activate the parasympathetic nervous system, or the **"rest and digest"** state. This allows the brain to be in a receptive state for learning, making the process of decoding and comprehending numbers significantly easier. It’s about building a positive, calm association with the act of numeracy.

Real-World Connection:
Think about how you feel when you're trying to solve a tough problem while listening to loud, distracting music. The music splits your attention, making it harder to concentrate. Our nervous system works in a similar way. Stress is like loud music in your brain; it takes up valuable cognitive space. By actively calming your nervous system with techniques like box breathing, you're turning down the "volume" of stress, allowing your brain to fully focus on the task of solving a numeracy problem without the distraction of internal stress signals.
Learning Moment:
The key takeaway here is that **your state dictates your performance.** You have the power to consciously shift your mental state to one that is optimal for learning. This isn't just a trick; it's a physiological hack that puts you in control. The act of numeracy becomes easier and more enjoyable when you approach it from a place of calm. Trust your ability to create the right conditions for your brain to succeed.

<!-- Deep Dive Module 3 -->

<h3 class="text-2xl font-bold text-gray-800">Module 3 Deep Dive: The History of Numbers</h3>
The fascinating fact about numbers and angles isn't just a quirky detail; it's a powerful tool for **visual memorization**. The human brain is incredibly good at remembering patterns and visual information. By associating the shape of a number with a concrete visual (its angles), you are creating a strong mental anchor that makes the number and its value more memorable. This technique bypasses rote memorization and taps directly into the brain's natural ability to form visual associations. This is a form of **mnemonic device**, a learning strategy that helps organize and retain information. By understanding this historical context, you're not just learning a fact; you're gaining a deeper appreciation for the logic and structure behind the numbers we use every day.

Real-World Connection:
Think about why logos are so effective. The Nike swoosh or the Apple logo are simple, visual cues that instantly trigger a complex set of associations in your mind. The same principle applies here. By associating the shape of a number with the number of its angles, you're giving your brain a simple, powerful "logo" for that number's value. This makes recalling the number and its properties easier and faster, turning a simple fact into a deeply embedded visual memory.
Learning Moment:
The key takeaway here is that **visuals are a shortcut to memory.** You've completed a powerful course on numeracy, but you've also gained a universal tool that can be applied to any challenge, from academic subjects to creative pursuits and beyond. This is your personal blueprint for success. What new skill will you master next?

```
        </div>
    </div>

    <!-- Deep Dive Module 4 -->
    <div id="deep-dive-module4" class="space-y-4">
        <h2 class="text-2xl font-bold text-gray-800">Module 4 Deep Dive: The Number Triangle Technique</h2>
        <p class="text-gray-700">The Number Triangle is a powerful visual tool that connects the four basic operations of arithmetic. It's a prime example of **relational learning**, where you learn by understanding the relationships between concepts, not just the concepts in isolation. By seeing that $5+3=8$ is directly linked to $8-3=5$, you're building a mental model of how addition and subtraction are inverses. The same applies to multiplication and division. This method bypasses rote memorization of multiplication tables and instead builds a robust, interconnected web of number facts in your brain. This makes it easier to solve problems on the fly because you're not just recalling a fact; you're navigating a network of related concepts. It's about building a deeper, more flexible understanding of numbers. </p>
        <div class="p-4 bg-purple-100 border-l-4 border-purple-400 rounded-r-lg shadow-sm">
            <p class="font-semibold text-purple-800">Real-World Connection:</p>
            <p class="text-purple-700 mt-1">Think of a recipe. You don't just memorize the steps; you understand how the ingredients relate to each other. You know that if you have flour and water, you can make dough. You also know that if you have dough, you can break it back down into flour and water. The number triangle is the same thing. You're learning the "recipe" for numbers, understanding how they combine and break apart. This relational understanding is far more useful than simply memorizing the facts in isolation.</p>
            <p class="font-semibold text-purple-800 mt-4">Learning Moment:</p>
            <p class="text-purple-700 mt-1">The key takeaway here is that **understanding relationships makes you a more flexible thinker.** By using the number triangle, you're not just memorizing math facts; you're building a robust mental model of how numbers work. This skill will serve you not just in math class but in any situation that requires logical, relational thinking. Trust in your ability to see the connections, and you'll become a more capable problem-solver.</p>
        </div>
    </div>

    <!-- Deep Dive Module 5 -->
    <div id="deep-dive-module5" class="space-y-4">
        <h2 class="text-2xl font-bold text-gray-800">Module 5 Deep Dive: Beyond Numeracy</h2>
        <p class="text-gray-700">The conclusion of our foundational course hints at the ultimate goal: using these principles to promote a love of numeracy and a calm mind. The core principles of an optimal learning state, intentional practice, and visual memorization can be applied far beyond numbers. This is about building a habit of **metacognition**—the ability to think about your own thinking. By understanding how you learn best, you can take control of any learning process. The confidence you gain from mastering numeracy can be a springboard to tackling other subjects, from complex scientific formulas to foreign languages.
```

```
This course is a foundational step in becoming a self-directed, lifelong learner. The skills you've developed are not just for math; they are for life.</p>
                <div class="p-4 bg-purple-100 border-l-4 border-purple-400 rounded-r-lg shadow-sm">
                    <p class="font-semibold text-purple-800">Real-World Connection:</p>
                    <p class="text-purple-700 mt-1">Think about a time you tried to learn something new. Did you get frustrated and give up, or did you take a moment to understand the process? Mastering the principles of this course is like gaining a superpower. It gives you the ability to approach any challenge with a clear head, a focused mind, and a proven strategy for success. Whether it's learning to code, play an instrument, or simply preparing for a big presentation, the skills of self-awareness and intentional practice are your greatest assets.</p>
                    <p class="font-semibold text-purple-800 mt-4">Learning Moment:</p>
                    <p class="text-purple-700 mt-1">The key takeaway here is that **you are not just learning a skill; you are learning how to learn.** This framework of mindset, state control, and deliberate practice is the ultimate meta-skill. You've completed a powerful course on numeracy, but you've also gained a universal tool that can be applied to any challenge, from academic subjects to creative pursuits and beyond. This is your personal blueprint for success. What new skill will you master next?</p>
                </div>
            </div>

            <hr class="border-gray-300">

            <!-- Final Quiz -->
            <div id="final-test" class="card space-y-8">
              <h2 class="text-3xl font-bold text-gray-900">Final Test: Test Your Knowledge</h2>
              <p class="text-gray-700">Congratulations on completing the Deep Dive! Answer the following questions to test your overall understanding of the core principles.</p>

              <div id="final-quiz-container" class="space-y-6">
                <!-- Final Quiz Questions will be dynamically added here -->
              </div>

              <button id="submit-final-test" class="px-6 py-3 bg-blue-600 text-white font-bold text-lg rounded-lg shadow-md hover:bg-blue-700 transition-colors">Submit Test</button>
              <p id="final-score-message" class="mt-4 text-xl font-bold"></p>
            </div>

        </section>

    </div>

    <script>
        document.addEventListener('DOMContentLoaded', () => {
            // --- Drag and Drop Logic (Module 3) ---
            const dragContainer = document.getElementById('drag-container');
            const checkButton = document.getElementById('check-button');
```

```
        const guidanceButton = document.getElementById('guidance-button');
        const guidanceText = document.getElementById('guidance-text');
        const messageEl = document.getElementById('message');

        if (dragContainer && checkButton && guidanceButton && guidanceText &&
messageEl) {
            let dragAttempts = 0;
            const correctOrder = ['item-0', 'item-1', 'item-2', 'item-3'];
            const encouragingMessages = [
              "That was a good try! Let's think about this a different way.",
              "Nice attempt! Remember the key principle we just learned.",
              "Don't give up! Look at the definitions again and try to apply them correctly.",
            ];

            const handleDragStart = (e) => {
                e.target.classList.add('dragging');
                e.dataTransfer.setData('text/plain', e.target.id);
            };

            const handleDragEnd = (e) => {
                e.target.classList.remove('dragging');
            };

            const handleDragOver = (e) => {
                e.preventDefault();
                const draggingItem = document.querySelector('.dragging');
                const sibling = e.target.closest('.drag-item');

                if (sibling && draggingItem !== sibling) {
                    const rect = sibling.getBoundingClientRect();
                    const isAbove = e.clientY < rect.top + rect.height / 2;
                    dragContainer.insertBefore(draggingItem, isAbove ? sibling :
sibling.nextSibling);
                }
            };

            document.querySelectorAll('.drag-item').forEach(item => {
                item.addEventListener('dragstart', handleDragStart);
                item.addEventListener('dragend', handleDragEnd);
            });

            dragContainer.addEventListener('dragover', handleDragOver);

            checkButton.addEventListener('click', () => {
                const userOrder = Array.from(dragContainer.children).map(item => item.id);
                const isCorrect = JSON.stringify(userOrder) === JSON.stringify(correctOrder);

                if (isCorrect) {
```

```
                    messageEl.textContent = 'Correct! The order is perfect.';
                    messageEl.className = 'mt-2 text-sm font-semibold text-green-600';
                    checkButton.disabled = true;
                    Array.from(dragContainer.children).forEach(item => item.style.borderColor =
'#34d399');
                } else {
                    dragAttempts++;
                    if (dragAttempts >= 3) {
                        messageEl.textContent = "Incorrect again. Let's go back and review the
lesson.";
                        messageEl.className = 'mt-2 text-sm font-semibold text-red-600';
                        setTimeout(() => {
                            window.scrollTo({ top: document.getElementById('module3').offsetTop,
behavior: 'smooth' });
                            dragAttempts = 0;
                        }, 2000);
                    } else {
                        const randomMessage = encouragingMessages[Math.floor(Math.random()
* encouragingMessages.length)];
                        messageEl.textContent = `${randomMessage} You have ${3 -
dragAttempts} tries left.`;
                        messageEl.className = 'mt-2 text-sm font-semibold text-red-600';
                    }
                }
            });

            guidanceButton.addEventListener('click', () => {
                guidanceText.classList.toggle('hidden');
                guidanceButton.textContent = guidanceText.classList.contains('hidden') ? 'Show
Guidance' : 'Hide Guidance';
            });
        }


        // --- Mini Quiz Logic ---
        const quizData = {
            quiz1: {
                correct: "Neuroplasticity",
                guidance: "The term is a combination of a word for 'nerves' and a word for
'malleable' or 'changeable'."
            },
            quiz2: {
                correct: "Priming the brain for learning",
                guidance: "The lesson mentions that the opposite of a stressed state is a
receptive state. What does that receptive state allow your brain to do?"
            },
            quiz3: {
                correct: "Cognitive scaffolding",
```

```
            guidance: "This method involves providing a framework (the pictures and book) for the child to build their own understanding, which helps them learn a task they couldn't do alone. What is this concept of supportive learning called?"
        },
        quiz4: {
            correct: "Better sleep and calmness",
            guidance: "The lesson contrasts reading with other high-stimulus activities. What is the direct effect of a low-stimulus activity like reading on the nervous system?"
        }
    };

    const encouragingMessagesQuiz = [
      "That was a good try! Let's think about this a different way.",
      "Nice attempt! Remember the key principle we just learned.",
      "Don't give up! Look at the definitions again and try to apply them correctly.",
    ];

    const setupMiniQuiz = (quizId, correct, guidance, redirectSectionId) => {
        const quizContainer = document.getElementById(quizId + '-container');
        const checkBtn = document.getElementById('check-' + quizId);
        const messageEl = document.getElementById(quizId + '-message');
        const guidanceEl = document.getElementById(quizId + '-guidance');

        if (quizContainer && checkBtn && messageEl && guidanceEl) {
            let attempts = 0;
            let isAnswered = false;

            checkBtn.addEventListener('click', () => {
                if (isAnswered) return;
                const selected = quizContainer.querySelector('input[name="' + quizId + '"]:checked');
                if (!selected) {
                    messageEl.textContent = 'Please select an answer.';
                    messageEl.className = 'mt-2 text-sm font-semibold text-red-600';
                    return;
                }
                if (selected.value === correct) {
                    messageEl.textContent = 'Correct!';
                    messageEl.className = 'mt-2 text-sm font-semibold text-green-600';
                    isAnswered = true;
                    quizContainer.querySelectorAll('input').forEach(input => input.disabled = true);
                    checkBtn.disabled = true;
                } else {
                    attempts++;
                    if (attempts >= 3) {
                        messageEl.textContent = `Incorrect again. The correct answer was "${correct}".`;
```

```
                        messageEl.className = 'mt-2 text-sm font-semibold text-red-600';
                        isAnswered = true;
                        quizContainer.querySelectorAll('input').forEach(input => input.disabled =
true);
                        checkBtn.disabled = true;
                        setTimeout(() => {
                            window.scrollTo({ top:
document.getElementById(redirectSectionId).offsetTop, behavior: 'smooth' });
                        }, 2000);
                    } else {
                        const randomMessage =
encouragingMessagesQuiz[Math.floor(Math.random() * encouragingMessagesQuiz.length)];
                        messageEl.textContent = `${randomMessage} You have ${3 - attempts}
tries left.`;
                        messageEl.className = 'mt-2 text-sm font-semibold text-red-600';
                    }
                }
            });
        }
    };

    setupMiniQuiz('quiz1', 'Neuroplasticity', quizData.quiz1.guidance,
'deep-dive-module1');
    setupMiniQuiz('quiz2', 'Priming the brain for learning', quizData.quiz2.guidance,
'deep-dive-module2');
    setupMiniQuiz('quiz3', 'Cognitive scaffolding', quizData.quiz3.guidance,
'deep-dive-module3');
    setupMiniQuiz('quiz4', 'Better sleep and calmness', quizData.quiz4.guidance,
'deep-dive-module4');


    // --- Final Quiz Logic ---
    const finalQuizData = [
        {
            question: "What is the scientific term for the brain's ability to reorganize itself by
forming new neural connections?",
            options: ["Neuro-linguistics", "Neuroplasticity", "Cognitive dissonance"],
            solution: "Neuroplasticity",
            guidance: "The term is a combination of a word for 'nerves' and a word for
'malleable' or 'changeable'."
        },
        {
            question: "What is the primary effect of calming the nervous system before
numeracy practice?",
            options: ["Enhancing the fight-or-flight response", "Priming the brain for
learning", "Improving your memory of the multiplication table"],
            solution: "Priming the brain for learning",
```

```
            guidance: "The lesson mentions that the opposite of a stressed state is a receptive state. What does that receptive state allow your brain to do?"
        },
        {
            question: "The ancient fact about numbers and angles is an example of what learning principle?",
            options: ["Rote memorization", "Visual memorization", "Passive learning"],
            solution: "Visual memorization",
            guidance: "This method involves associating a shape with a concrete visual, which is a powerful way for the brain to organize and retain information. What is this concept called?"
        },
        {
            question: "The Number Triangle technique is a prime example of what kind of learning?",
            options: ["Rote memorization", "Relational learning", "Isolated fact memorization"],
            solution: "Relational learning",
            guidance: "The number triangle helps you understand the connections between different arithmetic operations, rather than just learning them as isolated facts. What is this concept of connected learning called?"
        },
        {
            question: "What is the key takeaway of the course regarding metacognition?",
            options: ["Learning one skill prevents you from learning another.", "Learning how to learn is the ultimate meta-skill.", "Only children can effectively learn new skills."],
            solution: "Learning how to learn is the ultimate meta-skill.",
            guidance: "The lesson discusses the ability to think about your own thinking. What is the overarching message about this ability?"
        }
    ];

    const finalQuizContainer = document.getElementById('final-quiz-container');
    const submitFinalTestBtn = document.getElementById('submit-final-test');
    const finalScoreMessage = document.getElementById('final-score-message');
    const finalQuizAttempts = {};

    const renderFinalQuiz = () => {
        if (!finalQuizContainer) return;
        finalQuizContainer.innerHTML = '';
        finalQuizData.forEach((q, index) => {
            finalQuizAttempts[index] = 0;
            const questionHtml = `
                <div class="bg-gray-100 p-4 rounded-lg shadow-inner">
                    <p class="font-semibold mb-2">Question ${index + 1}: ${q.question}</p>
                    <div class="space-y-2">
                        ${q.options.map((opt, optIndex) => `
                            <div>
```

```
                            <input type="radio" id="final-q${index}-opt${optIndex}"
name="final-q${index}" value="${opt}">
                            <label for="final-q${index}-opt${optIndex}">${opt}</label>
                        </div>
                    `).join('')}
                </div>
                <div class="flex space-x-2 mt-4">
                    <button id="final-check-${index}" class="px-4 py-2 bg-blue-600
text-white rounded-lg shadow-md hover:bg-blue-700 transition-colors">Check
Answer</button>
                    <button id="final-guidance-${index}" class="px-4 py-2 bg-yellow-500
text-white rounded-lg shadow-md hover:bg-yellow-600 transition-colors">Show
Guidance</button>
                </div>
                <p id="final-q${index}-message" class="mt-2 text-sm font-semibold"></p>
                <div id="final-q${index}-guidance-text" class="hidden mt-4 p-4
bg-yellow-100 border-l-4 border-yellow-400 text-yellow-800 rounded-r-lg">
                    <p class="font-semibold">Guidance:</p>
                    <p>${q.guidance}</p>
                </div>
            </div>
        `;
        finalQuizContainer.innerHTML += questionHtml;
    });
};

const setupFinalQuizLogic = () => {
    finalQuizData.forEach((q, index) => {
        const checkBtn = document.getElementById(`final-check-${index}`);
        const guidanceBtn = document.getElementById(`final-guidance-${index}`);
        const messageEl = document.getElementById(`final-q${index}-message`);
        const guidanceEl = document.getElementById(`final-q${index}-guidance-text`);
        const quizContainer = document.getElementById('final-quiz-container');

        if (checkBtn && guidanceBtn && messageEl && guidanceEl && quizContainer) {
            guidanceBtn.addEventListener('click', () => {
                guidanceEl.classList.toggle('hidden');
                guidanceBtn.textContent = guidanceEl.classList.contains('hidden') ? 'Show
Guidance' : 'Hide Guidance';
            });

            checkBtn.addEventListener('click', () => {
                const selected =
quizContainer.querySelector(`input[name="final-q${index}"]:checked`);
                if (!selected) {
                    messageEl.textContent = 'Please select an answer.';
                    messageEl.className = 'mt-2 text-sm font-semibold text-red-600';
                    return;
```

```
                    }
                    if (selected.value === q.solution) {
                        messageEl.textContent = 'Correct!';
                        messageEl.className = 'mt-2 text-sm font-semibold text-green-600';
                        checkBtn.disabled = true;

finalQuizContainer.querySelectorAll(`input[name="final-q${index}"]`).forEach(input =>
input.disabled = true);
                    } else {
                        finalQuizAttempts[index]++;
                        if (finalQuizAttempts[index] >= 3) {
                            messageEl.textContent = `Incorrect again. The correct answer was
"${q.solution}".`;
                            messageEl.className = 'mt-2 text-sm font-semibold text-red-600';
                            checkBtn.disabled = true;

finalQuizContainer.querySelectorAll(`input[name="final-q${index}"]`).forEach(input =>
input.disabled = true);
                        } else {
                            const randomMessage =
encouragingMessagesQuiz[Math.floor(Math.random() * encouragingMessagesQuiz.length)];
                            messageEl.textContent = `${randomMessage} You have ${3 -
finalQuizAttempts[index]} tries left.`;
                            messageEl.className = 'mt-2 text-sm font-semibold text-red-600';
                        }
                    }
                });
            }
        });
    };

    submitFinalTestBtn.addEventListener('click', () => {
        let score = 0;
        let totalQuestions = finalQuizData.length;
        finalQuizData.forEach((q, index) => {
            const selected =
document.querySelector(`input[name="final-q${index}"]:checked`);
            if (selected && selected.value === q.solution) {
                score++;
            }
        });

        finalScoreMessage.textContent = `You scored ${score} out of ${totalQuestions}.`;
        finalScoreMessage.className = `mt-4 text-xl font-bold ${score >= totalQuestions /
2 ? 'text-green-600' : 'text-red-600'}`;
        submitFinalTestBtn.disabled = true;
    });
```

```
            renderFinalQuiz();
            setupFinalQuizLogic();
        });
    </script>

</body>
</html>
```