UNIT 1

1. What is the author's view on the importance of education beyond school graduation? In fact, if you constantly rely on someone else to teach you and never learn the skills to teach yourself, you’ll be greatly limiting your opportunities to advance your skills and knowledge.

2. In the context of the text, why is self-education considered a vital skill for software developers? Self-education is a vital skill in a world where new technologies are introduced every single day, and a typical web developer is expected to know at least three programming languages to even be eligible for a junior-level position.

3. According to the text, is self-education typically taught in formal educational systems? Unfortunately, self-education isn’t a skill that’s taught in schools.

4. How does the text challenge the notion of different "learning styles" among individuals? It turns out that the idea that we all have different learning styles is a myth. We all tend to learn best by doing and teaching. Active learning is a much more effective way to learn than any other way.

5. What does the text suggest about the most effective way to learn something? If I show you how to do something, you might forget it, but if you do something yourself, you’re much more likely to remember it, and if you actually teach what you’re trying to learn to someone else, not only do you remember it, but you get a much deeper understanding of it.

6. How does the text highlight the significance of active learning and teaching in the learning process? At the very best, by using that approach you’d amass all the information about your subject, but you still wouldn’t have actually learned it.

7. In what ways does the author relate the concept of "play" to the learning process? Being able to tap into that ability to play around is a powerful tool you can use, not only to motivate you, but to greatly accelerate the pace at which you learn. Before you read a book on a subject, skim the book and dive right in and start playing around. Don’t worry if you don’t know what you’re doing. Just have fun and see what kind of questions your mind develops as you experiment and explore.

8. What personal examples does the author provide to support the idea that play enhances learning? Baby animals play skills they’ll need to survive. Play cards. Aanswer ask.

9. How does the text recommend approaching the process of learning a subject from a book or reference material? Before you read a book on a subject, skim the book and dive right in and start playing around.

10. According to the author, what is the ultimate value of teaching what you've learned to someone else? The key guiding principle is this idea of learning through play, experimentation, and teaching what you learned to someone else. This simple process that comes natural to us all, but somehow gets “taught” out of us, is the simplest and purest way to learn.

UNIT 2

1. Why did the author feel the need to develop a repeatable system for self-learning? Often, this pressure has been my own fault, due to me jumping into things and getting in way over myhead, but regardless of the source, it has forced me to develop a repeatable system for self-learning. In the next few chapters I’m going to take you through a 10-step system I developed to learn anything quickly. Let’s start off by talking about what exactly this system is and how it works.

2. What was the author's initial approach to learning new subjects, and what challenges did they face with it? Early in my career, I learned primarily by finding a book on the subject I wanted to learn about and reading through it cover to cover. Only when I had finished reading about the subject would try to actually implement what I learned. Using this process, I found that I was learning, but at a very slow pace, and I’d often have to go back through the book to fill in the gaps I’d invariably have in my knowledge about a subject.

3. According to the author, what three main things are needed to learn a technology

effectively? How to get started, the breadth of the subject and the basics.

4. How does the author's new approach to learning differ from their earlier method of Reading a book cover to cover? It turns out that getting those three pieces of knowledge isn’t as easy of a task as itmight seem. Learning how to get started with a technology can be a challenge, and it’s often difficult to find out what is the 20% you need to know to be 80% effective with a technology. Plus, I often had a hard time finding a compact description of the breadth of a technology. Often this information was spread throughout an entire book or several different books.

5. How does the author describe their experience of learning the Go programming language? I used this technique to learn the Go programming language in a very short time period—just a few weeks. I focused on learning how to write code with Go as soon as possible. Then I got an overall idea of how big the programming language was and what kinds of libraries were available. I wanted to get an overall feel for what the language could do. Finally, I went through and learned the basics. I only expanded on those basics when I needed to dive deeper.

6. What is the basic idea of the 10-step process the author discusses? The basic idea of the 10- step process is to start by getting a basic understanding of what you’re trying to learn—enough to know what you don’t know.

7. What challenges did the author encounter while trying to find information about a technology? Then take that information and use it to define the scope of what you want to learn, along with what success will look like. Armed with that knowledge, you can find resources—and not just books—to help you learn what you want to know.

8. How does the 10-step process help learners define their goals and resources for learning? Finally, you can create your own learning plan to chart the course you’re going to take to learn your subject and filter the materials down to just the best ones that will help you achieve your goal.

9. What is the "learn, do, learn, teach" (LDLT) process, and why is it effective in the learning plan? Once you’ve done this legwork and know what you’re going to learn and how you’re going to learn it, you can take each waypoint in your learning plan and apply the process of “learn, do, learn, teach” (LDLT) to gain a deep understanding of the subject matter as you progress to your goal.

10. What advice does the author offer regarding the flexibility of the 10-step process? The first part of the 10-step process is the research portion and it’s done once. But steps 7 through10 are repeated for each module you end up creating in your learning plan. This technique ends up being effective because it forces you to clearly define a goal for what you’re trying to learn upfront, and it constantly moves you in the direction of that goal by actually doing instead of just reading or listening to lectures.

UNIT 3

1. What is the challenge with learning something new, especially at the beginning of the learning process? Most developers crack open a book and start reading through it without even knowing what they don’t know. They leave these “unknown unknowns” for later discovery. The problem with this approach is that you’re very likely to learn the wrong thing or get in way over your head. It’s important to at least understand a little bit about a subject before diving into it. Then you can figure out exactly what you need to learn and decide the best way to do it.

2. How does the concept of "unknown unknowns" relate to the importance of getting a big picture of a topic? Suppose you wanted to learn how to do digital photography. You might start out by searching the internet for everything you could find on the subject and skimming blog posts and articles about digital photography. You could probably have a good idea of how big the topic is and what kind of subtopics exist within a few hours of research.

3. Why is it advised to avoid diving into a subject without some initial understanding? To complete this step, do some basic research on the topic you want to learn about. You can probably accomplish most of this research using internet searches. If you happen to have a book on the subject, you might read an introductory chapter to skim through the material. Don’t spend too much time on this step, though.

4. What is the objective of "getting the big picture" in Step 1 of this learning process? Remember, the goal isn’t to actually learn the topic here, but to just get a big picture of what it’s about and how big it is.

5. Why is determining the scope of what you want to learn important, and how does it relate to avoiding feelings of being overwhelmed? Determine scope 169 could break it down into a smaller scope. You can’t learn everything about digital photography in any reasonable amount of time, so you’ll have to decide what areas to focus on and what the scope should be. Perhaps you want to know how to shoot portrait pictures. That could be your scope.

6. Why is it important to define success before embarking on a learning endeavor? Before starting any great endeavor, it’s very important to define success. Without knowing what success looks like, it’s both difficult to aim and to know when you’ve actually hit the target. Before you try to learn anything, you should have a clear picture in your mind of what success will look like. When you know what your target is, yo can more easily work backwards from the goal to determine the steps you need to take to get there.

7. How does having a clear understanding of what success looks like help in the learning process? The goal of this step is to come up with a clear and concise statement that will define success for your learning endeavor. Depending on what you’re trying to learn, this statement might look very different, but you want to make sure you have a specific set of success criteria that you can use to adequately assess whether or not you’ve met your learning goal.

8. Can you provide an example of specific success criteria for a learning goal? The goal of this step is to come up with a clear and concise statement that will define success for your learning endeavor. Again, if we follow the example of learning digital photography, you might decide that a good success criteria would involve learning to use all the features of your digital camera, being able to describe what they are, and understanding why and when to use each feature.

9. What is the purpose of creating clear and unambiguous success criteria? Good success criteria are specific, not ambiguous. Don’t make a vague statement about what you want to accomplish. Instead, list a specific result or thing you should be able to do once you’ve reached your goal.

10. How do well-defined success criteria assist in keeping a learner on track while working towards a goal? Depending on what you’re trying to learn, thisstatement might look very different, but you want to make sure you have a specific setof success criteria that you can use to adequately assess whether or not you’ve met your learning goal.

UNIT 4

1. Why is it important to gather multiple resources when learning about a new topic, according to the text? Resources can take many forms besides just books. In fact, today, with the wide availability of the internet and all the different content available on it, you can find many resources for almost any topic you want to learn about.

2. What are some different types of resources mentioned in the text that can aid in the learning process? In this step you want to find as many resources as possible for learning about the topic you’ve selected. Don’t worry about quality at this point. This is similar to a brainstorming step. Later on you’ll filter your resources and select the best ones, but for now you want to get as many different resources as possible.

3. What is the purpose of gathering numerous resources before filtering and selecting the best ones? One of the best ways to do this is to jump on your computer and start searching for your topic. I usually start my searches with Amazon to see how many books I can find and then I’ll search on Google to see if I can find videos, blog articles, podcasts, or other content that would be useful to me. You can even go “old school” and hit the library. The important thing is that you find a variety of different resources. You don’t want to be biased by the viewpoints of a single source and you want to have access to as much information as possible.

4. How does the text suggest finding various resources, and what are some of the possible sources for learning materials? Books, Blog posts, Online videos, Experts or people already knowledgeable about the topic you want to learn about, Podcasts, Source code, Example projects and Online documentation.

5. In Step 5, what is meant by "creating a learning plan," and why is it essential for effective learning? For this step, you need to create your own learning path. Think of it as an outline for a book you’d write on the subject. In fact, your learning path will probably be very similar to the table of contents of a book when you’re done. You basically want to end up with a series of modules you individually focus on learning until you reach your final goal.

6. How can analyzing the table of contents of books and resources help you shape your learning plan, and what factors should be considered in this process? A good way to create your learning plan is to see how others are teaching the subject you want to learn about. When I’m working on this step, I’ll often look at the table of contents of several of the books I’ve chosen as possible resources from step 4. If five different authors have chosen to break up their content into the same sets of modules and the same ordering, chances are I should make my learning plan follow a similar approach.

7. Why is it necessary to filter resources, and what is the purpose of this step in the learning process? At this point, you probably have plenty of books, blog posts, and other resources for learning about digital photography, but the problem is that you can’t possibly utilize all of them. Much of the data is redundant and not all of it will fit your learning plan.

8. What are the challenges associated with using too many learning resources, as mentioned in the text? It’s not practical to try to read 10 books and 50 blog posts on a subject—and even if you did, a large portion of that information would be duplicated. It’s important to narrow down your resources to a smaller list of the best ones to help you achieve your goals.

9. How does the text suggest selecting the most valuable resources from the large pool gathered in step 4? You gathered together all the resources you could find on your subject. For this step, go through all the resources you’ve gathered in step 4 and figure out which ones have contente that will help you to best cover the content in your learning plan. Also take a look at reviews and try to determine which resources are of the highest quality.

10. What role do reviews, such as Amazon book reviews, play in the process of filtering and choosing the best resources for learning? I usually will look at the Amazon reviews for the books I’m considering purchasing and narrow it down to the best one or two books that I think will provide me the best bang for my buck.

UNIT 5

1. What are the two common learning mistakes the text mentions, and why is it important to strike a balance between them? First, there’s the problem of jumping in without knowing enough—acting too soon. Second, there’s the problem of preparing too much before jumping in—acting too late. You want to strike a balance between the two and learn just enough to get started, but not so much that you don’t get to explore on your own—where you end up learning the best.

2. What is the primary goal of "Step 7: Learn enough to get started" in the learning process? For this step, the goal is to get just enough information about the topic you’re learning about to be able to get started and to play around in the next step.

3. How does the text suggest you approach learning a new technology or programming language in this step? This step would involve learning how to create a basic “Hello, world!” program or set up your development environment. For something like photography, it might involve learning enough about a module on light to experiment on your own with various light sources and their effects.

4. What is the analogy used in the text to describe the approach in this step, and why is it relevant? The key to this step is to not go too far. It’ s easy to get carried away and start consuming all the resources you have on the module you’ re trying to learn, but you’ ll find the most success if you can avoid that temptation. Instead, focus on learning the minimal amount you’ll need to get started and to be able to experiment on your own in the next step. You may want to skim material or read chapter summaries or introductions to gather enough information to have a basic idea of what you’re doing.

5. What makes "Step 8: Play around" fun and potentially scary, according to the text? It’ s fun because you get to do exactly what the step says: play around. But it’ s scary because the step is completely unbounded. There are no rules. You can do whatever you want to do for this step. It’ s up to you to decide how to best execute this step. Learn the basics quickly and start playing around.

6. How does the suggested approach in "Step 8" differ from the way most people traditionally learn a subject, and what are the advantages of this approach? Now consider the approach I’ m suggesting here, where you don’ t read everything upfront, but one of the first things you do is play and experiment on your own. With this approach, you learn by exploring and doing. These questions lead you in the direction of what’ s actually important. When you get back and find the answers to your own questions, not only will it be more rewarding, but you’ ll remember more of what you study, because what you learn will be important to you.

7. What role does curiosity play in self-learning, as described in the text? When we’ re children, we have rapid periods of learning driven mainly by curiosity. We want to know how the world works, so we ask questions and seek out answers to help us understand the world we’ re living in. Unfortunately, as we grow up, much of that curiosity tends to disappear as we start to take the world for granted. As a result, our learning slows down and we find education boring instead of fascinating.

8. In "Step 9: Learn enough to do something useful," what is the main goal or objective? The goal of this step is to bring that curiosity-fueled learning back. In step 8, you played around and hopefully came up with some questions that you couldn’t find answers to on your own. Now is the time to answer those questions. For this step, you’ ll go through all the resources you gathered and learn about your module in depth.

9. How does the text suggest you approach answering the questions that arose during the "play around" step? For photograph example, this would be the point where you take all the questions you had while playing around and try to answer them by reading up on the subject. You might go through your resources and look up everything pertaining to light or any other questions that came up while you were playing around.

10. How does the text advise you to use your success criteria from "Step 3: Define success" during this learning phase, and why is it important? Try to tie what you’re learning back to your ultimate goal. Each module you master should in some way move your forward toward your final destination.

UNIT 6

1. According to Benjamin Franklin's quote, what is the significance of teaching in the learning process? It’ s easy to be filled with thoughts of self doubt when you’ re considering whether you’ re worthy or not to teach what you know—or you think you know—to someone else. But if you want to learn a subject in depth, if you really want to gain understanding about a subject, you have to teach it.

2. Why do the author and Benjamin Franklin emphasize the importance of teaching in the text? In reality, you only need to be one step ahead of someone to teach them. Sometimes, in fact, experts who are many steps ahead of a student have a hard time teaching, because they can’ t relate to the student.

3. What is the main idea behind the assertion that you only need to be one step ahead of someone to teach them? In reality, you only need to be one step ahead of someone to teach them.

4. How can teaching what you've learned to someone else help in your own learning process, as described in the text? Sometimes, in fact, experts who are many steps ahead of a student have a hard time teaching, because they can’t relate to the student. They end up glossing over details that they think are simple, because they don’ t remembers what it was like to be a beginner.

5. What are some different ways in which you can teach what you've learned, as suggested in the text? You could write a blog post or create a YouTube video. You could even talk to your spouse about what you’ve learned and explain it to them.

6. How does teaching what you've learned contribute to deepening your understanding of a subject, according to the text? When you go through this process, you’ll find that there are many things that you thought you understood that you didn’t. You’ll also begin to make connections that you didn’t see before and simplify the information in your head as you try to condense it down and regurgitate it.

7. What is the author's perspective on the importance of developing a personal learning system in the text? For this step, I’m going to ask you to move out of your comfort zone and teach what You’ve learned to someone else. It’s the only way to know for sure that you’ve learned something, and it’s a great way to fill in the gaps in your own learning as you try to explain it to others.