# STUDENT ACTIVITY 5.4 KEY

MTA Course: Web Development Fundamentals
Lesson name: Web Development Fundamentals 5.4
Topic: Understand application pools
File name: WebDevFund_SA_5.4_Key

## Lesson Objective:

**5.4:** Understand application pools. *This objective may include but is not limited to:* purpose of application pools; effect of application pools on Web applications. *This objective does not include:* configuring or assigning application pools.

## Resources, software, and additional files needed for this lesson:

- A Windows®-based PC with installed Web development software. Examples include Microsoft® Visual Studio 2008®, or
  - Microsoft Visual Basic 2008®, Express Edition *(http://www.microsoft.com/express/downloads/#2008-Visual-Basic)*
  - Microsoft Visual C# 2008®, Express Edition *(http://www.microsoft.com/express/downloads/#2008-Visual-CS)*
  - Microsoft Visual Web Developer 2008, Express Edition *(http://www.microsoft.com/express/downloads/#2008-Visual-Web-Developer)*
- Use these sites for additional information:
  **Video lesson on starting an application pool**
  *http://www.asp.net/learn/aspnet-4-quick-hit-videos/video-8843.asp*

## Directions to the student:

Review the steps to create application pools. Start by visiting the link to review the tutorial. Then answer the following questions.

## Creating Application Pools

*http://www.iis.net/ConfigReference/system.applicationHost/applicationPools*

1. Read the “Overview” section on that page.

2. Go to the section called “How to create a new application pool” and continue there.

**Questions:**

1. Identify the key benefits of using application pools.

Because application pools allow a set of Web applications to share one or more similarly configured worker processes, they provide a convenient way to isolate a set of Web applications from other Web applications on the server computer**.**

2. What element contains a collection of <*add*> elements?

**<applicationPools>**

3. Give an example of how the <*add*> element might be used? (Answers may vary, but should resemble the following.)

**<add name="DefaultAppPool" />**

4. What element defines default settings for all application pools on the Internet Information Services (IIS) 7 server?

**<applicationPoolDefaults>**

5. What are the two ‘modes application pools’ can be created?

**Integrated mode**

**Classic mode**

6. In what situation would you use each of them?

**Integrated mode—IIS 7 application pools run in this mode by default. Integrated mode allows IIS to process requests in the application pool by using the IIS 7 integrated pipeline. This allows ASP.NET modules to participate in IIS request processing regardless of the type of resource requested.**

**Classic mode—This uses the IIS 6 processing pipeline for hosting ASP.NET applications. In this mode, requests are processed initially through IIS 7 modules, and ASP.NET requests are processed further by the aspnet_isapi.dll file. Classic mode is not as efficient as integrated mode, but it does allow you to run applications developed using ASP.NET version 1.1 on an IIS 7 server without modifying the application to run in integrated mode.**