Database Fundamentals: Administration

with Adam Wilbert

	Topics from MTA Exam 98-364																			
	Understand core database concepts	1.1 Understand how data is stored in tables	1.2 Understand relational database concepts	1.3 Understand data manipulation language (DML)	1.4 Understand data definition language (DDL)	**Create database objects**	2.1 Choose data types	2.2 Understand tables and how to create them	2.3 Create views	2.4 Create stored procedures and functions	**Manipulate data**	3.1 Select data	3.2 Insert data	3.3 Updated data	3.4 Delete data	**Understand data storage**	4.1 Understand normalization	4.2 Understand primary, foreign, and composite keys	4.3 Understand indexes	**Administer a database**	5.1 Understand database security concepts	5.2 Understand database backups and restore
Securing the Database Server																						
Understanding security fundamentals																				X	
Securing the database server																				X	
Implementing server level security with SQL Authentication																				X	
Understanding Windows authentication																				X	
Creating a new Windows user																				X	

Topics from MTA Exam 98-364

Enforcing Database Roles	Understand core database concepts				Create database objects				Manipulate data				Understand data storage			Administer a database	
	1.1 Understand how data is stored in tables	1.2 Understand relational database concepts	1.3 Understand data manipulation language (DML)	1.4 Understand data definition language (DDL)	2.1 Choose data types	2.2 Understand tables and how to create them	2.3 Create views	2.4 Create stored procedures and functions	3.1 Select data	3.2 Insert data	3.3 Updated data	3.4 Delete data	4.1 Understand normalization	4.2 Understand primary, foreign, and composite keys	4.3 Understand indexes	5.1 Understand database security concepts	5.2 Understand database backups and restore
Managing password policies																X	
Understanding database server roles																X	
Assigning server roles																X	
Challenge: Creating a new user account																X	
Solution: Creating a new user account																X	

	Topics from MTA Exam 98-364																				
	Understand core database concepts	1.1 Understand how data is stored in tables	1.2 Understand relational database concepts	1.3 Understand data manipulation language (DML)	1.4 Understand data definition language (DDL)	**Create database objects**	2.1 Choose data types	2.2 Understand tables and how to create them	2.3 Create views	2.4 Create stored procedures and functions	**Manipulate data**	3.1 Select data	3.2 Insert data	3.3 Updated data	3.4 Delete data	**Understand data storage**	4.1 Understand normalization	4.2 Understand primary, foreign, and composite keys	4.3 Understand indexes	**Administer a database**	5.1 Understand database security concepts	5.2 Understand database backups and restore
Working with Fixed Database Roles																						
Granting access to a database																					X	
Understanding fixed database roles																					X	
Assigning fixed database roles																					X	

	Understand core database concepts	1.1 Understand how data is stored in tables	1.2 Understand relational database concepts	1.3 Understand data manipulation language (DML)	1.4 Understand data definition language (DDL)	Create database objects	2.1 Choose data types	2.2 Understand tables and how to create them	2.3 Create views	2.4 Create stored procedures and functions	Manipulate data	3.1 Select data	3.2 Insert data	3.3 Updated data	3.4 Delete data	Understand data storage	4.1 Understand normalization	4.2 Understand primary, foreign, and composite keys	4.3 Understand indexes	Administer a database	5.1 Understand database security concepts	5.2 Understand database backups and restore
Assigning Database Object Permissions																						
Understanding object permissions																					X	
Granting object level permissions in SSMS																					X	
Granting user permissions to objects																					X	
Managing roles																					X	
Understanding ownership chains																					X	
Creating and using a guest account																					X	
Challenge: Assigning object permissions																					X	
Solution: Assigning object permissions																					X	

| | Topics from MTA Exam 98-364 | | | | | | | | | | | | | | | | | |
| | **Understand core database concepts** | | | | **Create database objects** | | | | **Manipulate data** | | | | **Understand data storage** | | | **Administer a database** | |
	1.1 Understand how data is stored in tables	1.2 Understand relational database concepts	1.3 Understand data manipulation language (DML)	1.4 Understand data definition language (DDL)	2.1 Choose data types	2.2 Understand tables and how to create them	2.3 Create views	2.4 Create stored procedures and functions	3.1 Select data	3.2 Insert data	3.3 Updated data	3.4 Delete data	4.1 Understand normalization	4.2 Understand primary, foreign, and composite keys	4.3 Understand indexes	5.1 Understand database security concepts	5.2 Understand database backups and restore
Creating Database Backups																	
Using SQL Server Recovery Models																	X
Understanding the available backup options																	X
Scheduling backups in SSMS																	X
Restoring a database in SSMS																	X