

# **Deductive Reasoning Exercises for Attention and Executive Functions**

*Real-Life Problem Solving*

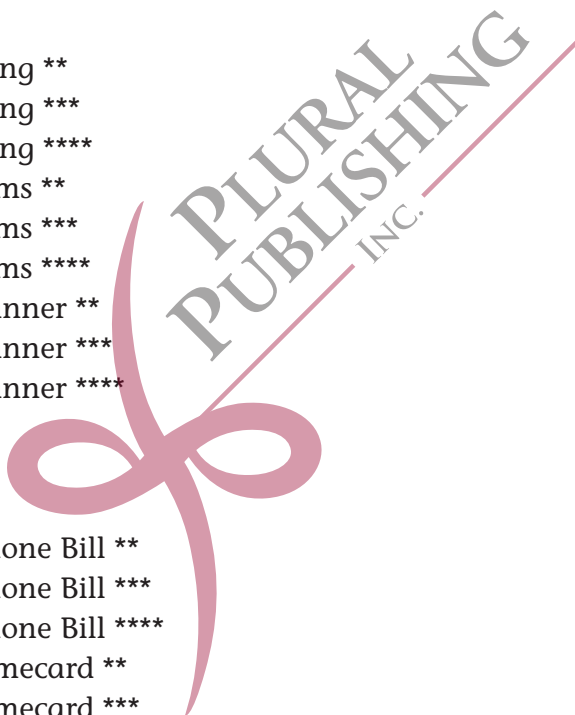
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# Preface

The goal of this book is to provide activities for clinicians to use when targeting specific skills or compensatory strategies for attention and executive functions. By using exercises based on real-life situations, clinicians can also address insight into deficits. A variety of levels are included to fit the needs of a range of clients as well as the needs of individual clients as they progress. A variety of themes are presented so that clinicians can select exercises based on client interest and personal experience.

The majority of my career has been as a speech-language pathologist working in a hospital setting, specifically in inpatient rehabilitation. I work with clients recovering from acquired neurological issues; including brain injury, stroke, and cancer. My clients often demonstrate decreased insight into their new deficits and have not had the opportunity to return to their home/community to experience firsthand the reality of their new symptoms.

I was inspired to write this book one evening while contemplating a memorable conversation with a client earlier in the day. This may be a familiar interaction for other clinicians. During the therapy session, the client had told me that he or she “never did” the activities I was presenting *OR* used the skills I was targeting. This kind of discussion happened so often, yet I found *myself* using these same skills and completing similar activities throughout my own day (scheduling, organizing, finances, etc.).

I often used workbook exercises until my patients are ready to participate in more active functional integration activities. However, I was not satisfied with the materials on the market. I felt that therapy materials based on real-life situations would be meaningful and engaging to my patients. That night it occurred to me that I could create a workbook of functional therapy activities to mimic daily cognitive tasks. This book is the result of that process.

## Individual Exercise 10A

### Daily Planner\*\*

#### Scenario

You are scheduling classes for next term. You need to take the following classes: algebra, biology, English literature, and a physical education class. Each class ends a few minutes before the hour to allow you to travel to your next class. Use the following clues and the day planner to determine when to take each class.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8-9							
9-10							
10-11							
11-12							
12-1							
1-2							
2-3							
3-4							

#### Clues

1. You would prefer to start classes after 9:00 AM.
2. Biology is offered Monday, Wednesday, and Friday from 8:00 AM to 9:00 AM or from 2:00 PM to 4:00 PM.
3. You can choose Tai Chi, Tap dancing, or Rugby as your physical education class.
4. Tap dancing is offered Tuesday, Thursday, and Friday from 9:00 AM to 10:00 AM.
5. English literature is only offered Monday and Wednesday from 1:00 PM to 4:00 PM.
6. Rugby is Tuesday and Thursday from 10:00 AM to 11:30 AM.
7. Algebra is Monday and Friday 9:00 AM to 12:00 PM or Tuesday and Thursday 9:00 AM to 12:00 PM.
8. Tai Chi is Monday, Wednesday, and Friday 11:00 AM to 12:00 PM.

## Individual Exercise 10B

### Daily Planner\*\*\*

#### Scenario

You are scheduling classes for next term. You need to take the following classes: written composition, chemistry, psychology, and healthy living. Each class ends a few minutes before the hour to allow you to travel to your next class. You also need to schedule at least 15 hours a week to study and complete your homework. Use the following clues and the day planner to determine when to take each class.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8-9							
9-10							
10-11							
11-12							
12-1							
1-2							
2-3							
3-4							

#### Clues

1. You don't want to have to study more than four hours on the weekend, because you work from 8:00 AM until 2:00 PM Saturday and Sunday.
2. Chemistry is available Tuesday and Thursday 10:00 AM to 11:00 AM or Monday and Wednesday 1:00 PM to 4:00 PM.
3. Psychology is Tuesday, Thursday, and Friday from 2:00 PM to 4:00 PM.
4. You will eat lunch from 12:00 PM to 1:00 PM.
5. Written composition is available Monday, Tuesday, and Thursday 1:00 PM to 3:00 PM or Monday, Wednesday, and Friday 8:00 AM to 10:00 AM.
6. Healthy living is offered Tuesday and Thursday 9:00 AM to 10:30 AM or 1:00 PM to 2:30 PM.
7. In addition to the chemistry lecture, you need to attend a chemistry lab Tuesday and Thursdays from 1:00 PM to 2:00 PM.

## Individual Exercise 11A

### Filling a Pill Box\*\*

#### Scenario

Your mother asked you to fill her pill box once a week. Use the following clues from the medicine labels to put the correct pills in the box for the correct time and day.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning							
Noon							
Evening							
Bedtime							

#### Clues

- The vitamin D is only taken one day a week.
- The medicine for nerve pain must be taken twice daily: in the morning and the evening.
- Your mother takes Calcium at lunch, since it must be taken with a meal.
- Aspirin should be taken every day.
- The multivitamin should be taken in the morning.
- The blood pressure pills should be taken every day in the evening.
- The aspirin should be taken in the morning.
- The calcium is only three days a week. Your mother likes to take it Monday, Wednesday, and Fridays.
- The nerve pain medicine is taken every day.



## Individual Exercise 11B

### Filling a Pill Box\*\*\*

#### Scenario

Your sister asked you to finish filling her pill box. Use the following clues from the medicine labels to put the correct medications in the box for the correct time and day.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>Morning</b> 9:00 AM		Bowel meds		Heartburn meds		Bowel meds	
<b>Noon</b> 1:00 PM						Pain medica- tion	Pain medica- tion
<b>Evening</b> 5:00 PM							
<b>Bedtime</b> 10:00 PM	Vitamin B	Vitamin B	Vitamin B	Vitamin B			

#### Clues

- Her pain medication must be taken every four hours during the day.
- She has a shot for her multiple sclerosis symptoms once a week. The shot is the day after the bowel meds on the weekend.
- She takes vitamin B at bedtime, since it must be taken without food.
- She always remembers to take her asthma medication during the 10 o'clock news.
- Your sister takes her shot in the evening.
- She takes a bowel medication three days a week.
- The heartburn pills are taken at breakfast.
- She takes three types of medications in the mornings.
- Vitamin B is taken every day.
- Asthma medications are taken every day.
- Your sister likes to take the bowel medication Tuesday, Thursday, and Saturday.
- She takes two types of medications at bedtime.

## Individual Exercise 20A

## Splitting a Tab\*\*

## Scenario

You get lunch at the hospital cafeteria with your two sisters: Camille and Rene. You pay at the cash register and then they pay you back. Using the receipt and the grid below, determine how much your sisters should pay you.

University Medical Center Café Receipt	
Grilled cheese	\$2.95
Fruit plate	\$4.95
Salad Bar—large	\$5.50
Almond snack bag	\$2.55
Coffee—small	\$1.75
Bottled juice	\$1.95
Iced tea—large	\$2.25
Cookies—3	\$2.85
TOTAL	\$24.75

	You	Camille	Rene
Lunch			
Snack			
Drink			
TOTAL			

## Clues

1. You bought the fruit plate, not the fruit juice.
2. Everyone had a cookie and then split the almonds after lunch.
3. Camille had the coffee.
4. Rene doesn't like cheese.

*Bonus:* Who would have had the best deal if you had all split the tab evenly?