# **Comprehensions: Worksheet**

Welcome to Riverblossom Hills, a neighborhood introduced in *The Sims 2 Seasons* Expansion Pack (released in 2007, which was a while ago...). In the original roll-out of *The Sims*, Bob Newbie had to live a monotonous weather life of clear skies. But in *The Sims 2 Seasons*, the Sims experience different seasons and changes in the daily weather. The default setting for duration of a season is 5 Sim days. Each season brings different chances of daily precipitation:

Spring: 30% daily chance
Summer: 20% daily chance
Fall: 15% daily chance
Winter: 50% daily chance

#### **Practice 1**

- 1. Create a dictionary with seasons as keys and chance of precipitation in each season as values.
- 2. Make a comprehension that swaps the keys and values.

## **Practice 2**

Use a comprehension to make a structure that indicates that the chance of precipitation for each season is 'low' or 'high' with 50% threshold.

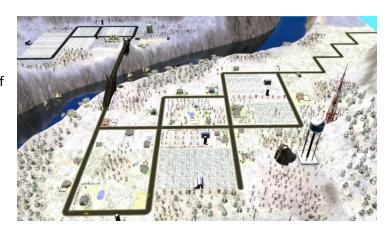
## **Practice 3**

Use a string method to alter each element within a comprehension. How you wish to alter the elements is your choice.

## **Practice 4**

Pretending you can't do the math, use a comprehension to figure out how many clear days there are out of 5 days in a particular season, given what you know about the chance of precipitation in a given Sims season.

Bird's eye view of Riverblossom Hills in Winter.



#### **Practice 5**

- 1. Referring back to Practice #1, make a list out of the keys in the dictionary you made.
- 2. Using the list you just made indicating the number of clear days in a Sims season, use a comprehension to merge these two lists into a dictionary.

This weather-controlling machine allows the Sims extend or change the seasons or weather.

## Practice 6

Oh no! The Weathernaught 57X is malfunctioning and creating crazy weather! Use a comprehension to create a list or dictionary that represents at least 2 seasons with random weather each day.



## **Practice 7**

Phew! Leod McGreggor used his handiness skill to fix the machine. Now, make a comprehension to show that Leod will go out and garden if the season is spring and the weather is clear.