

“Vignettes” contain tutorials and user guides

vignettes/monocle3-
basics.Rmd

```
---
title: "Monocle3 Basics"
author: "Cole Trapnell"
date: "`r Sys.Date()`"
output: rmarkdown::html_vignette
vignette: >
  %\VignetteIndexEntry{Vignette Title}
  %\VignetteEngine{knitr::rmarkdown}
  %\VignetteEncoding{UTF-8}
---

```{r setup, include = FALSE}
knitr::opts_chunk$set(
 collapse = TRUE,
 comment = "#>"
)
```

```{r}
library(monocle3)
library(ggplot2)
```

```{r}
cds <- load_a549()
```

```{r}
cds <- preprocess_cds(cds, num_dim = 20)
```

```{r}
plot_pc_variance_explained(cds)
```
```

The testthat package helps you execute **unit tests**

```
context("String length")
library(stringr)

test_that("str_length is number of characters", {
  expect_equal(str_length("a"), 1)
  expect_equal(str_length("ab"), 2)
  expect_equal(str_length("abc"), 3)
})

test_that("str_length of factor is length of level", {
  expect_equal(str_length(factor("a")), 1)
  expect_equal(str_length(factor("ab")), 2)
  expect_equal(str_length(factor("abc")), 3)
})

test_that("str_length of missing is missing", {
  expect_equal(str_length(NA), NA_integer_)
  expect_equal(str_length(c(NA, 1)), c(NA, 1))
  expect_equal(str_length("NA"), 2)
})
```

← “Expectation”

“Test”