

```
split_data<-  
  data%>%initial_split(prop=.5)  
  data_train<-training(split_data)  
  data_test<-testing(split_data)
```

```
lm_fit <-  
  linear_reg() %>%  
  set_engine("lm") %>%  
  set_mode("regression")
```

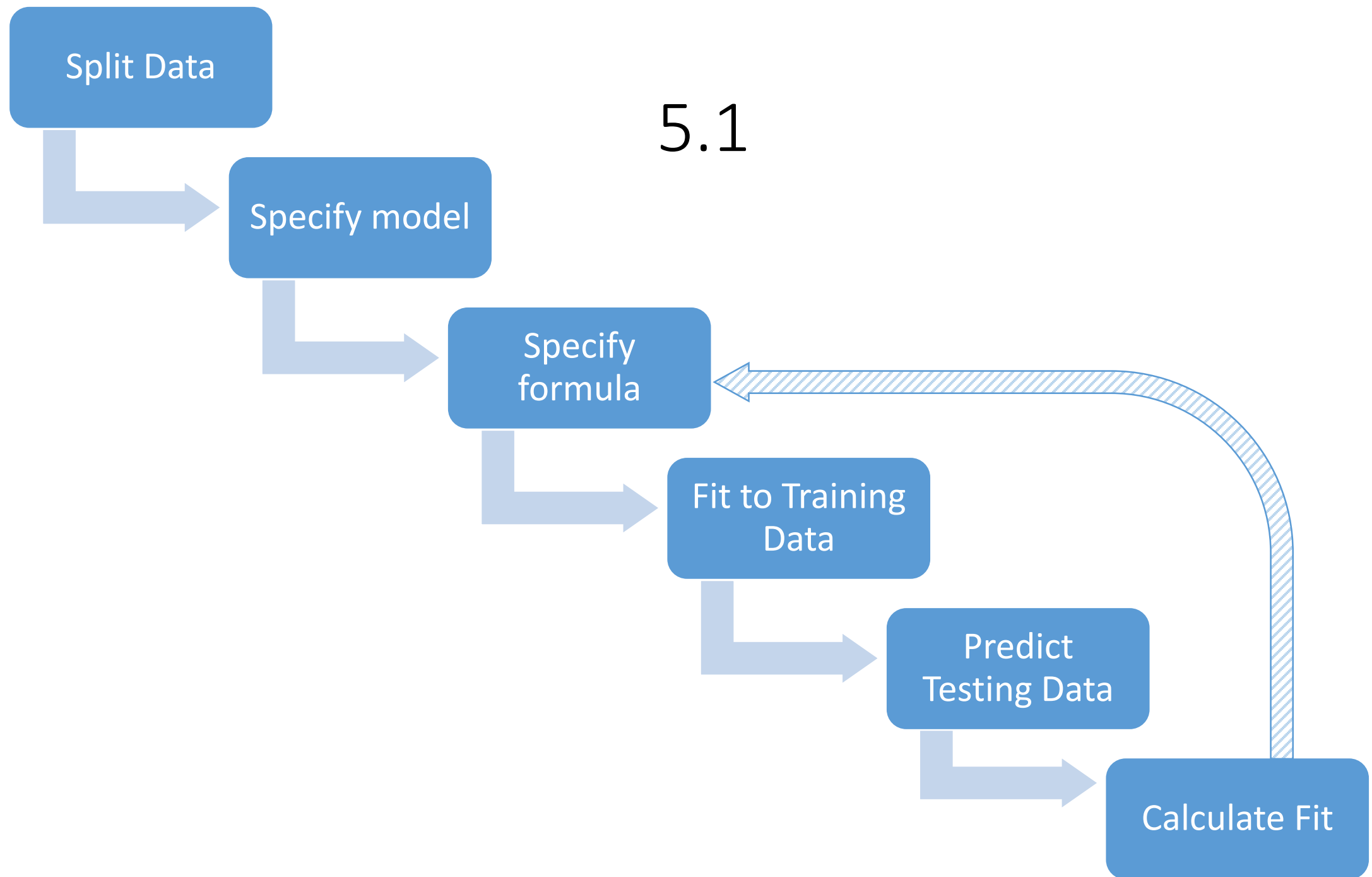
```
<OUTCOME>_formula<-  
  as.formula("<OUTCOME>~<PREDICTOR(s)>")
```

```
lm_results<-  
  lm_fit%>%  
  fit(<OUTCOME>_formula,data=data_train)
```

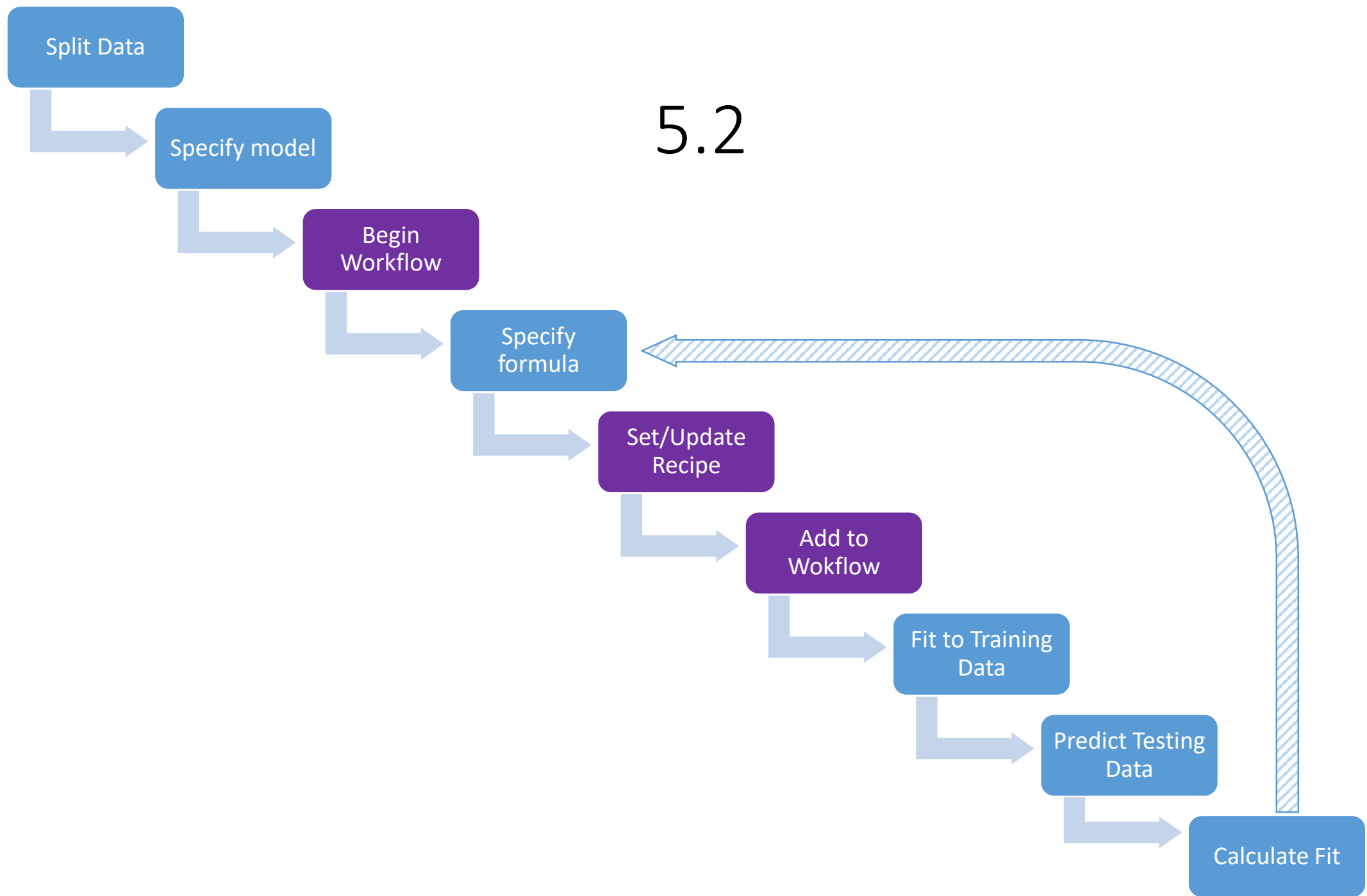
```
data_test<-  
  lm_results%>%  
  predict(new_data=data_test)%>%  
  rename(pred1=.pred)%>%  
  bind_cols(data_test)
```

```
rmse_1<-  
  rmse(data_test, truth=<OUTCOME>,  
        estimate=pred1)
```

5.1



5.2



```
split_data<-
  data%>%initial_split(prop=.5)
  data_train<-training(split_data)
  data_test<-testing(split_data)

lm_fit <-
  linear_reg() %>%
  set_engine("lm")%>%
  set_mode("regression")

<OUTCOME>_wf<-workflow()%>%
  add_model(lm_fit)

<OUTCOME>_formula<-
  as.formula("<OUTCOME>~<PREDICTOR(s)>")

<OUTCOME>_rec<-
  recipe(<OUTCOME>_formula,data=data)%>%
  step_dummy(<CATEGORICAL VARIABLES>)
```

```
<OUTCOME>_wf<-<OUTCOME>_wf%>%
  add_recipe(<OUTCOME>_rec)

lm_results<-
  lm_fit%>%
  fit(<OUTCOME>_formula,data=data_train)

lm_results<-
  fit(<OUTCOME>_wf,data_train)
  lm_results%>%
    tidy()
  lm_results%>%
    pull_workflow_fit()%>%
    glance()

data_test<-
  lm_results%>% predict(new_data=data_test)%>%
  rename(pred1=.pred)%>%
  bind_cols(data_test)

rmse_1<-
  rmse(data_test, truth=<OUTCOME>,
  estimate=pred1)
```