```python
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn.model_selection import train_test_split
from sklearn.feature_extraction.text import TfidfVectorizer
from sklearn.linear_model import LogisticRegression
from sklearn.metrics import accuracy_score, classification_report, confusion_matrix

# Sample dataset
data = {
    'text': [
        "The moon landing was faked by Hollywood.",
        "NASA's new telescope captured amazing star photos.",
        "Vaccines are a plot to microchip people.",
        "COVID-19 vaccines save lives and prevent severe illness.",
        "5G towers are spreading coronavirus.",
        "New study finds coffee improves cognitive function."
    ],
    'label': ['FAKE', 'REAL', 'FAKE', 'REAL', 'FAKE', 'REAL']
}
df = pd.DataFrame(data)

# Data preparation
X = df['text']
y = df['label']

# Split dataset
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.33, random_state=42)

# TF-IDF Vectorizer
vectorizer = TfidfVectorizer(stop_words='english')
X_train_tfidf = vectorizer.fit_transform(X_train)
X_test_tfidf = vectorizer.transform(X_test)

# Logistic Regression Model
model = LogisticRegression()
model.fit(X_train_tfidf, y_train)

# Predictions
y_pred = model.predict(X_test_tfidf)

# Evaluation
print("Accuracy:", accuracy_score(y_test, y_pred))
print("\nClassification Report:\n", classification_report(y_test, y_pred))

# Confusion Matrix
cm = confusion_matrix(y_test, y_pred, labels=['FAKE', 'REAL'])
```

```python
# Plot Confusion Matrix
plt.figure(figsize=(6, 4))
sns.heatmap(cm, annot=True, fmt='d', cmap='Blues', xticklabels=['FAKE', 'REAL'],
yticklabels=['FAKE', 'REAL'])
plt.title("Confusion Matrix")
plt.xlabel("Predicted")
plt.ylabel("Actual")
plt.tight_layout()
plt.show()

# Prediction Example
def predict_news(text):
    tfidf = vectorizer.transform([text])
    prediction = model.predict(tfidf)[0]
    print(f"\nText: {text}\nPrediction: {prediction}")

predict_news("Aliens built the pyramids.")
predict_news("New breakthrough in cancer treatment.")
```