

## ACTIVITY 11.1

### STUDENT ROLE-PLAYING CARDS

**The Abbots**

Your household wage income is \$10,000 a year. Your family has three children. Since your family has no investments, you have no capital gains income.

**The Bosmans**

Your household wage income is \$25,000 a year. You have no children. Since your family has no investments, you have no capital gains income.

**The Chans**

Your household wage income is \$45,000 a year. Your family has no children. Since your family has no investments, you have no capital gains income.

**The Dasguptas**

Your household wage income is \$70,000 a year. Your family has one child. In addition to this income, your investments have earned you \$5,000 in capital gains.

**The Engles**

Your household wage income is \$100,000 a year. In addition to this income, your investments have earned you \$20,000 in capital gains. Your family has no children.

## ACTIVITY 11.2

### TAX LAW SIMULATION

**Directions:** Your group lives in a country with five families. Each person in your group represents one of the families. Each person in the group has received a card that describes his or her family. Family representatives should not show their card to others in the group.

Your group must decide what the tax structure is going to be for your country. The country has a total taxable wage income of \$250,000. In addition, households earned \$25,000 in capital gains. The country's government needs to raise \$50,000 for defense, schools, roads, and government salaries. Your group must raise enough (\$50,000) in tax revenue to fund the government budget.

It is up to your group to write the tax law. Everyone in your group should participate in deciding what the tax rates in the country should be. When debating how the country should tax its citizens, each person should remember the circumstances of his or her own family, as described on the cards. While family representatives do not have to show their cards to anyone in the group, people in the group may want to introduce themselves to other group members and exchange information about their situations.

Your group will be judged successful if it comes up with a tax scheme that yields \$50,000 in tax revenue. A family representative will be viewed as successful if (1) his or her group comes up with a tax scheme that generates \$50,000 and (2) his or her family pays less tax than those families with the same background in other groups in the class.

The Revenue Service in your country has put together the following information.

Tax Bracket	Total Wage Income in Tax Bracket	Tax Rate (in %)	Tax Revenue
\$0 to \$25,000	\$110,000		
\$25,000 to \$50,000	\$70,000		+
\$50,000 and Above	\$70,000		+
Sum of Tax Revenues Listed Above			=
Capital Gains Tax:		\$25,000 x _____ %	+
Subtract Amount of Child Tax Credits:		\$ _____ X 4 =	-
Total Tax Revenue			=

ACTIVITY 11.2, CONTINUED

**TAX LAW SIMULATION**

Your group must decide what percentage rate to charge in each tax bracket. The table is read in the following manner:

- The first bracket asks what percentage you wish to tax on the first \$25,000 of household income.
- The second bracket asks what percentage you wish to tax on the NEXT \$25,000 of household income.
- The third bracket asks what percentage you wish to tax on household income OVER \$50,000.

Example:

If your group chooses rates of 5% for the first \$25,000 of income, 10% for the next \$25,000, and 5% for all income above \$50,000, then a household making \$30,000 in wage income would pay a total tax of:

5%	x	\$25,000 (5% on first \$25,000)	=	\$1,250
10%	x	\$5,000 (10% on remaining \$5,000)	=	<u>\$ 500</u>
Total Tax				\$1,750

The table above gives the total taxable income in each tax bracket for the country, so your group can calculate how much tax revenue is earned in the whole country. A tax law with rates of 5% on the first \$25,000, 10% on the second \$25,000, and 5% on the amount over \$50,000 would earn:

5%	x	\$110,000	=	\$5,500
10%	x	\$70,000	=	\$7,000
5%	x	\$70,000	=	<u>\$3,500</u>
Total Tax Revenue				\$16,000

ACTIVITY 11.2, CONTINUED

**TAX LAW SIMULATION**

In addition to taxing income, your group may also decide to levy a tax on capital gains, which is income a household earns when an asset (such as a stock or property) appreciates in value.

Finally, your group may also elect to give a tax credit for each child living in the country. There are four children in the country. You must subtract the credited amount from your tax collections in calculating tax revenue.

Suppose your group decides to provide a tax credit of \$250 per child and decides to charge a 10% capital gains tax in addition to the taxes on wages listed above. This would total up as follows:

$$\begin{aligned} \$25,000 \times 10\% &= \$2,500 \\ &\text{in additional tax revenue from capital gains} \end{aligned}$$

$$\$250 \text{ per child} \times 4 \text{ children} = \$1,000 \text{ in credits}$$

Total Tax Revenue with the child tax credit and capital gains tax and tax rates described above:

$$\$16,000 + \$2,500 - \$1,000 = \$17,500$$

After your group has decided on a tax law and made sure that the law will raise \$50,000 in revenue, fill in the table in Activity 11.3 for your country. Each person must sign for the law to be enacted.

Be sure to name your country and enter it on the tax law form!

ACTIVITY 11.3

TAX LAW FOR COUNTRY OF \_\_\_\_\_

The following shall be the tax rates for the country:

Tax Bracket	Wage Income in Tax Bracket	Tax Rate	Tax Revenue
\$0 to \$25,000	\$110,000		
\$25,000 to \$50,000	\$70,000		+
\$50,000 and Above	\$70,000		+
Sum of Tax Revenues listed above			=
Capital Gains Tax: \$25,000 x _____ %			+
Subtract Amount of Child Tax Credits: \$ _____ X 4 =			-
Total Tax Revenue			=

Signed:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**ACTIVITY 11.4**  
**TAX FORMS**

Abbots: \$10,000 Wage Income

Tax Bracket	Your Wage Income in Each Tax Bracket	Tax Rate (in %)	Taxes on Income
\$0 to \$25,000	\$10,000		
\$25,000 to \$50,000	\$ 0		
\$50,000 and Above	\$ 0		
Sum of the Taxes Listed Above			=
Capital Gains Tax: \$0 x _____ %			+ 0
Subtract Amount of Child Tax Credit: \$ _____ x 3			-
Total Tax			=

Total Income (including capital gains ) = \$10,000

Average Tax Rate = (Total Tax/Total Income) x 100 = \_\_\_\_\_%

Marginal Tax Rate = If you earned one more dollar, what percent would you pay of that additional dollar in tax = \_\_\_\_\_%

ACTIVITY 11.4, CONTINUED

**TAX FORMS**

Bosmans: \$25,000 Wage Income

Tax Bracket	Your Wage Income in Each Tax Bracket	Tax Rate (in %)	Taxes on Income
\$0 to \$25,000	\$25,000		
\$25,000 to \$50,000	\$ 0		
\$50,000 and Above	\$ 0		
Sum of the Taxes Listed Above			=
Capital Gains Tax: \$0 x _____ %			+ 0
Subtract Amount of Child Tax Credit: \$ _____ x 0			- 0
Total Tax			=

Total Income (including capital gains ) = \$25,000

Average Tax = (Total Tax / Total Income) x 100 = \_\_\_\_\_%

Marginal Tax Rate = If you earned one more dollar, what percent would you pay of that additional dollar in tax = \_\_\_\_\_%

ACTIVITY 11.4, CONTINUED

**TAX FORMS**

Chans: \$45,000 Wage Income

Tax Bracket	Your Wage Income in Each Tax Bracket	Tax Rate (in %)	Taxes on Income
\$0 to \$25,000	\$25,000		
\$25,000 to \$50,000	\$20,000		
\$50,000 and Above	\$ 0		
Sum of the Taxes Listed Above			=
Capital Gains Tax: \$0 x _____ %			+ 0
Subtract Amount of Child Tax Credit: \$ _____ x 0			- 0
Total Tax			=

Total Income (including capital gains ) = \$45,000

Average Tax = (Total Tax / Total Income) x 100 = \_\_\_\_\_%

Marginal Tax Rate = If you earned one more dollar, what percent would you pay of that additional dollar in tax = \_\_\_\_\_%



ACTIVITY 11.4, CONTINUED

**TAX FORMS**

Dasguptas: \$70,000 Wage Income

Tax Bracket	Your Wage Income in Each Tax Bracket	Tax Rate (in %)	Taxes on Income
\$0 to \$25,000	\$25,000		
\$25,000 to \$50,000	\$25,000		
\$50,000 and Above	\$20,000		
Sum of the Taxes Listed Above			=
Capital Gains Tax: \$5,000 x _____ %			+
Subtract Amount of Child Tax Credit: \$ _____ x 1			-
Total Tax			=

Total Income (including capital gains ) = \$75,000

Average Tax = (Total Tax / Total Income) x 100 = \_\_\_\_\_%

Marginal Tax Rate = If you earned one more dollar, what percent would you pay of that additional dollar in tax = \_\_\_\_\_%

ACTIVITY 11.4, CONTINUED

**TAX FORMS**

Engles: \$100,000 Wage Income

Tax Bracket	Your Wage Income in Each Tax Bracket	Tax Rate (in %)	Taxes on Income
\$0 to \$25,000	\$25,000		
\$25,000 to \$50,000	\$25,000		
\$50,000 and Above	\$50,000		
Sum of the Taxes Listed Above			=
Capital Gains Tax: \$20,000 x _____ %			+
Subtract Amount of Child Tax Credit: \$ _____ x 0			- 0
Total Tax			=

Total Income (including capital gains) = \$120,000

Average Tax = (Total Tax / Total Income) x 100 = \_\_\_\_\_%

Marginal Tax Rate = If you earned one more dollar, what percent would you pay of that additional dollar in tax = \_\_\_\_\_%